EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	514	536/21	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/07/31 11:40
L2	383	l1 and $saccharide	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/07/31 11:46
L3	206	l2 and sulfated	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/07/31 11:46
L5	50	"l3" and (uronic ADJ acid)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/07/31 11:53
L6	1	"l3" and (unsaturat$ ADJ uronic ADJ acid)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/07/31 11:58
L7	907	536/56	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/07/31 11:46
L8	323	l7 and $saccharide	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/07/31 11:50
L9	23	l8 and sulfated	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/07/31 11:48
L10	2	l8 and (sulfated NEAR heparin)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/07/31 11:49
L11	3	l7 and (sulfated NEAR heparin)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/07/31 11:51
L12	49	l7 and heparin	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/07/31 11:50

EAST Search History

L13	1860	536/124	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/07/31 11:50
L14	1071	l13 and $saccharide	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/07/31 11:50
L15	9	l14 and (sulfated NEAR heparin)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/07/31 11:52
L16	24	l13 and ($saccharide NEAR heparin)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/07/31 11:54
L17	16	l16 and (uronic ADJ acid)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/07/31 11:54
L18	1042	514/56	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/07/31 11:54
L19	118	l18 and ($saccharide NEAR heparin)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/07/31 11:54
L20	58	l19 and (uronic ADJ acid)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/07/31 11:54
L21	9	l19 and (unsaturat$ ADJ uronic ADJ acid)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/07/31 11:59
L22	1	l19 and (unsaturat$ ADJ glucuronic ADJ acid)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/07/31 11:59

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                  USPATFULL/USPAT2
 NEWS  9  MAY 30  The F-Term thesaurus is now available in CA/CAplus
 NEWS 10  JUN 02  The first reclassification of IPC codes now complete in
                  INPADOC
 NEWS 11  JUN 26  TULSA/TULSA2 reloaded and enhanced with new search and
                  and display fields
 NEWS 12  JUN 28  Price changes in full-text patent databases EPFULL and PCTFULL
 NEWS 13  JUl 11  CHEMSAFE reloaded and enhanced
 NEWS 14  JUl 14  FSTA enhanced with Japanese patents
 NEWS 15  JUl 19  Coverage of Research Disclosure reinstated in DWPI

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=> s polysaccharide
L1      440908 POLYSACCHARIDE

=> s l1 and (sulfated(s)heparin)
L2        3320 L1 AND (SULFATED(S) HEPARIN)

=> s l2 and (unsatur?(a)glucuronic)
L3           1 L2 AND (UNSATUR?(A) GLUCURONIC)

=> dis l3 1 bib abs

L3   ANSWER 1 OF 1  WPINDEX  COPYRIGHT 2006 THE THOMSON CORP on STN
AN   2002-230190 [29]   WPINDEX
DNC  C2002-069969
TI   Mixture of sulfated polysaccharides, useful as
     antithrombotic agent having selective factor Xa inhibiting activity,
     obtained by depolymerization of heparin benzyl ester quaternary
     ammonium salt.
DC   B04
IN   DIAZ, J; PECQUET, C; PERRIN, E; VISKOV, C
PA   (AVET) AVENTIS PHARMA SA; (DIAZ-I) DIAZ J; (PECQ-I) PECQUET C; (PERR-I)
     PERRIN E; (VISK-I) VISKOV C
CYC  97
PI   FR 2811992       A1 20020125 (200229)*      20
     WO 2002008295    A1 20020131 (200229)  FR
        RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
            NL OA PT SD SE SL SZ TR TZ UG ZW
         W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
            DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
            KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU
            SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
     US 2002055621    A1 20020509 (200235)
     AU 2001077602    A  20020205 (200236)
     NO 2003000296    A  20030120 (200321)
     EP 1307491       A1 20030507 (200332)  FR
         R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
            RO SE SI TR
     KR 2003040364    A  20030522 (200360)
     BR 2001012612    A  20030729 (200365)
     CN 1447820       A  20031008 (200403)
     HU 2003000755    A2 20031229 (200413)
     JP 2004504451    W  20040212 (200413)       45
     MX 2003000579   A1 20030601 (200417)
     ZA 2003000898   A  20040728 (200466)       41
     NZ 524028       A  20041224 (200506)
     US 2005171055   A1 20050804 (200552)
     US 6969705      B2 20051129 (200578)
ADT  FR 2811992 A1 FR 2000-9572 20000721; WO 2002008295 A1 WO 2001-FR2332
     20010718; US 2002055621 A1 Provisional US 2000-229123P 20000831, US
     2001-909797 20010723; AU 2001077602 A AU 2001-77602 20010718; NO
     2003000296 A WO 2001-FR2332 20010718, NO 2003-296 20030120; EP 1307491 A1
     EP 2001-955436 20010718, WO 2001-FR2332 20010718; KR 2003040364 A KR
     2003-700689 20030116; BR 2001012612 A BR 2001-12612 20010718, WO
     2001-FR2332 20010718; CN 1447820 A CN 2001-814187 20010718; HU 2003000755
     A2 WO 2001-FR2332 20010718, HU 2003-755 20010718; JP 2004504451 W WO
     2001-FR2332 20010718, JP 2002-514199 20010718; MX 2003000579 A1 WO
     2001-FR2332 20010718, MX 2003-579 20030120; ZA 2003000898 A ZA 2003-898
     20030131; NZ 524028 A NZ 2001-524028 20010718, WO 2001-FR2332 20010718; US
     2005171055 A1 Provisional US 2000-229123P 20000831, Div ex US 2001-909797
     20010723, US 2005-96146 20050401; US 6969705 B2 Provisional US
     2000-229123P 20000831, US 2001-909797 20010723
FDT  AU 2001077602 A Based on WO 2002008295; EP 1307491 A1 Based on WO
     2002008295; BR 2001012612 A Based on WO 2002008295; HU 2003000755 A2 Based
     on WO 2002008295; JP 2004504451 W Based on WO 2002008295; MX 2003000579 A1
     Based on WO 2002008295; NZ 524028 A Based on WO 2002008295
PRAI FR 2000-9572          20000721
AN   2002-230190 [29]   WPINDEX
AB   FR   2811992 A UPAB: 20020508
     NOVELTY - A mixture (A) of sulfated polysaccharides (I) is new.
          DETAILED DESCRIPTION - A novel mixture (A) of sulfated
     polysaccharides (I) is claimed, where:
          (1) (I) have the general structure of the constituent
     polysaccharides of heparin;
          (2) (A) have average molecular weight 1500-3000 Daltons, anti-Xa
     activity 100-150 IU/mg, anti-IIa activity 0-10 IU/mg and a ratio of
     anti-Xa activity to anti-IIa activity of more than 10;
          (3) (I) contain 2-26 saccharide units and have a 4,5-
     unsaturated glucuronic acid 2-O-sulfate unit at at least
     one terminal; and
          (4) (A) are in alkali metal or alkaline earth metal salt form.
          An INDEPENDENT CLAIM is also included for the preparation of (A) by:
          (a) depolymerizing a quaternary ammonium salt (II) of heparin benzyl
     ester in an organic medium, using a strong organic base of pKa more than
     20 or sodium imidazolate;
          (b) converting the obtained depolymerized quaternary ammonium salt of
     heparin benzyl ester into the sodium salt;
          (c) saponifying the ester; and
          (d) optionally purifying the product.
          ACTIVITY - Anticoagulant; Thrombolytic; Cardiant; Neuroprotective;
     Antiarteriosclerotic.
          MECHANISM OF ACTION - Selective factor Xa inhibitor.
          A typical product (Ia) (having average molecular weight 1600 Daltons)
     had anti-Xa activity 94 IU/mg, anti-IIa activity less than 0.1 IU/mg and
     ratio of anti-Xa activity to anti-IIa activity more than 100.
          USE - (A) Are useful as antithrombotic agents, especially for the
     prevention of venous thrombosis or arterial thrombotic accidents,
     especially associated with myocardial infarction. They are also useful for
     the prevention and treatment of smooth muscle cell proliferation,
     angiogenesis, atherosclerosis or arteriosclerosis, and as neuroprotective
     agents.
          ADVANTAGE - (A) Have higher selectivity for the inhibition of factor
     Xa relative to factor IIa than heparin, and thus have a reduced risk of
     hemorrhagic side-effects. (A) Also have low toxicity.
     Dwg.0/0
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=> s l2 and (unsatur?(a)uronic)
L4           39 L2 AND (UNSATUR?(A) URONIC)

=> dis l4 1-39 bib abs

L4   ANSWER 1 OF 39  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   1967:479020  CAPLUS
DN   67:79020
TI   Enzymic degradation of ω-heparin (whale heparin)
AU   Yosizawa, Zensaku
CS   Sch. Med., Tohoku Univ., Sendai, Japan
SO   Biochimica et Biophysica Acta, General Subjects (1967), 141(3), 600-4
     CODEN: BBGSB3; ISSN: 0304-4165
DT   Journal
LA   English
AB   ω-Heparin isolated from whale organs was digested with crude
     heparinase from heparin-adapted flavobacteria and also with an eliminase
     separated from the crude enzyme.  ω- Heparin was degraded by
     the crude heparinase to the 3 major monosaccharides, an α-keto acid,
     N-sulfated glucosamine, and N,O-disulfated glucosamine.  As
     minor products, N-acetylglucosamine and an N-acetylglucosamine-containing
     unsatd. oligosaccharide were also found in the digest.  The eliminase
     digestion produced several unsatd. oligosaccharides.  Two contained
     unsatd. uronic acid and N-acetylglucosamine with and
     without O-sulfate.  These products were similar to those found in the
     degradation products of α-heparin and heparitin sulfate with these
     enzymes.  In addition, a study of the temperature optimum and the effects of
     inhibitors on the degradation of ω-heparin with the eliminase showed
     ω-heparin to be intermediate between α-heparin and heparitin
     sulfate.  Moreover, the unsatd. oligosaccharides produced and the changes
     in the reducing values after the action of these enzymes indicated that
     ω-heparin was not a mixture of α-heparin and heparitin sulfate,
     but a complex polysaccharide consisting of an
     N-acetylglucosamine-containing polysaccharide to which
     α-heparin-type  polysaccharides are attached.  15
     references.

L4   ANSWER 2 OF 39  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   1964:4273  CAPLUS
DN   60:4273
OREF 60:792c-f
TI   Structural studies of mucopolysaccharides (MPS) of connective tissues
AU   Hoffman, P.; Meyer, K.
CS   Columbia Univ.
SO   Federation Proceedings (1962), 21(6), 1064-9
     CODEN: FEPRA7; ISSN: 0014-9446
DT   Journal
LA   Unavailable
AB   Techniques used and results obtained in the establishment of the nature of
     the linkages between the component sugars of MPS are reviewed, with
     emphasis on M.'s studies on heparin structure.  Acid hydrolysis of
     N-desulfated and N-acetylated heparin, and the isolation of a disaceharide
     product are described.  Analysis of the disaceharide after isolation from
     a carbon-Celite column is presented.  Paper chromatograms of the heparin
     disaccharide after treatment with Ca(OH)2 at room temperature indicate the
     presence of free acetylglu-cosamine and anhydroacetylglucosamine, the
     latter being formed slowly from the former under alkaline conditions.  These
     results are explained by a scheme, which is outlined, in which the
     disaccharide is cleaved by an elimination reaction to free
     acetylglucosamine and unsatd. uronic acid (the cyclic
     form of a keto acid).  On the basis of other evidence, described in
     detail, the heparin disaccharide is designated as O-(2-acetamido-2-deoxy-
     α-D-glucopyranosyl)-(1 → 4)-D-glucuronic acid.  The structure
     of heparin is illustrated, as drawn from the evidence presented.  The
     sulfate on the 2-position of the uronic moiety is arbitrary, as no good
     evidence distinguishes between a 2 or 3 sulfate.  The 6-position of the
     hexosamine must contain sulfate, since the other positions are excluded by
     the evidence presented.  From the high yield of disulfated hexosamine,
     obtained from heparin with a flavobaeterinm heparinase, the
     uronic acid appears not to be sulfated.

L4   ANSWER 3 OF 39  IFIPAT  COPYRIGHT 2006 IFI on STN
AN    10664582  IFIPAT;IFIUDB;IFICDB
TI    MIXTURES OF POLYSACCHARIDES DERIVED FROM HEPARIN, THEIR
      PREPARATION AND PHARMACEUTICAL COMPOSITIONS CONTAINING THEM
INF   Viskov; Christian, Ris Orangis, FR
IN    Viskov Christian (FR)
PAF   Aventis Pharma S.A., Antony, FR
PA    Aventis Pharma S A FR (53500)
AG    FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER;LLP, 1300 I STREET, NW,
      WASHINGTON, DC, 20005, US
PI    US 2004171819   A1  20040902
AI    US 2003-680934      20031008
PRAI  FR 2002-12584       20021010
      US 2002-430095P     20021202 (Provisional)
FI    US 2004171819       20040902
DT    Utility; Patent Application - First Publication
FS    CHEMICAL
      APPLICATION
PARN  This application claims the benefit of priority from French Patent
      Application No. 0212584, filed Oct. 10, 2002, as well as the benefit of
      U.S. Provisional Application No. 60/430,095, filed Dec. 2, 2002.
CLMN  53
 OF 39  IFIPAT  COPYRIGHT 2006 IFI on STN
AB    The present invention relates to mixtures of polysaccharides
      derived from heparin having a mean molecular weight of 1500 to 3000
      Daltons and an anti-Xa/anti-IIa ratio greater than 30, their method of
      preparation and pharmaceutical compositions containing them.
CLMN  53

L4   ANSWER 4 OF 39  USPATFULL on STN
AN     2005:239988  USPATFULL
TI     Polysaccharides for pulmonary delivery of active agents
IN     Richardson, Thomas, South Boston, MA, UNITED STATES
       Venkataraman, Ganesh, Bedford, MA, UNITED STATES
       Qi, Yiwei, Andover, MA, UNITED STATES
       Picard, Michele, Dover, MA, UNITED STATES
PI     US 2005207988      A1   20050922
AI     US 2004-957218     A1   20041001 (10)
PRAI   US 2004-580869P     20040618 (60)
       US 2003-508062P     20031001 (60)
DT     Utility
FS     APPLICATION
LREP   FISH & RICHARDSON PC, P.O. BOX 1022, MINNEAPOLIS, MN, 55440-1022, US
CLMN   Number of Claims: 82
ECL    Exemplary Claim: 1
DRWN   8 Drawing Page(s)
LN.CNT 3145
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB     Formulation for pulmonary delivery of a therapeutic, prophylactic, or
       diagnostic agent including a low molecular weight heparin and a
       therapeutic, prophylactic, or diagnostic agent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4   ANSWER 5 OF 39  USPATFULL on STN
AN     2005:215004  USPATFULL
TI     Method for determining specific groups constituting heparins or low
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       molecular weight heparins
IN     Viskov, Christian, Ris Orangis, FRANCE
       Mourier, Pierre, Charenton Le Pont, FRANCE
PI     US 2005186679      A1   20050825
AI     US 2004-808410     A1   20040325 (10)
PRAI   EP 2004-290789      20040324
       FR 2004-1810        20040224
DT     Utility
FS     APPLICATION
LREP   FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, LLP, 901 NEW YORK
       AVENUE, NW, WASHINGTON, DC, 20001-4413, US
CLMN   Number of Claims: 34
ECL    Exemplary Claim: 1
DRWN   7 Drawing Page(s)
LN.CNT 1083
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB     The invention provides methods for analysing heparins,
       low-molecular-weight heparins, ultralow-molecular-weight heparins, and
       oligosaccharides by high performance liquid chromatography a stationary
       phase dynamically coated with a quaternary ammonium salt. The methods of
       the invention may be used to analyse samples without pre-treatment or to
       analyse samples that have been partially or exhaustively depolymerised
       and, optionally, reduced. Specific saccharides can be detected.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4   ANSWER 6 OF 39  USPATFULL on STN
AN     2005:195766  USPATFULL
TI     Substances directed against a specific sequence essential for heparanase
       catalytic activity and uses thereof as heparanase inhibitors
IN     Vlodavsky, Israel, Mevasseret Zion, ISRAEL
       Ilan, Neta, Rehovot, ISRAEL
       Levy-Adam, Flonia, Haifa, ISRAEL
PA     HADASIT MEDICAL RESEARCH SERVICE AND DEVELOPMENT COMPANY LTD.,
       JERUSALEM, ISRAEL (non-U.S. corporation)
PI     US 2005169907      A1   20050804
AI     US 2004-901943     A1   20040728 (10)
PRAI   IL 2004-160025      20040122
DT     Utility
FS     APPLICATION
LREP   FLEIT KAIN GIBBONS GUTMAN BONGINI & BIANCO, COURVOISIER CENTRE II, SUITE
       404, 601 BRICKELL KEY DRIVE, MIAMI, FL, 33131, US
CLMN   Number of Claims: 140
ECL    Exemplary Claim: 1
DRWN   7 Drawing Page(s)
LN.CNT 3336
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB     An amino acid sequence derived from the N' terminus region of the 50 Kd
       subunit of heparanase, preferably, the sequence including amino acid
       residues Lys.sup.158-Asn.sup.171 of human heparanase and any functional
       fragments thereof. Compositions for the inhibition of heparanase
       glycosidase catalytic activity, having as an active ingredient an
       isolated and purified peptide as the amino acid sequence. An antibody
       directed to the sequence and compositions and uses thereof as heparanase
       inhibitor. The use of the amino acid sequence in a screening method for
       specific heparanase inhibitors. Compositions including the heparanase
       inhibitors and methods for the treatment of heparanase related
       disorders.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4   ANSWER 7 OF 39  USPATFULL on STN
AN     2005:138619  USPATFULL
TI     Heterocyclic compounds and methods of making and using thereof
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IN      Rao, Yeleswarapu Koteswar, Hyderabad, INDIA
        Pal, Manojit, Hyderabad, INDIA
        Sharma, Vedula Manohar, Hyderabad, INDIA
        Venkateswarlu, Akella, Hyderabad, INDIA
        Pillarisetti, Ram, Norcross, GA, UNITED STATES
PI      US 2005119269       A1   20050602
AI      US 2004-976284      A1   20041028 (10)
PRAI    IN 2003-8612003      20031028
        US 2004-610163P      20040915 (60)
DT      Utility
FS      APPLICATION
LREP    WOMBLE CARLYLE SANDRIDGE & RICE, PLLC, P.O. BOX 7037, ATLANTA, GA,
        30357-0037, US
CLMN    Number of Claims: 59
ECL     Exemplary Claim: 1
DRWN    No Drawings
LN.CNT 13564
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB      Compounds of formula (I), and methods and/or compositions comprising
        compounds that are effective in modulating inflammatory responses, such
        as those resulting from AGE and glycated protein accumulation are
        provided. Methods and/or compositions comprising compounds that are
        effective in modulating smooth muscle cell proliferation and the
        diseases or conditions related thereto are also provided.    ##STR1##

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4    ANSWER 8 OF 39  USPATFULL on STN
AN      2005:105623  USPATFULL
TI      Oligosaccharide mixtures derived from heparin, preparation thereof and
        pharmaceutical compositions containing them
IN      Laux, Volker, Mainz, GERMANY, FEDERAL REPUBLIC OF
        Mourier, Plerre, Charenton Le Pont, FRANCE
        Viskov, Christian, Ris Orangis, FRANCE
PI      US 2005090561       A1   20050428
AI      US 2004-899618      A1   20040727 (10)
PRAI    FR 2003-9041         20030724
        WO 2004-FR1943       20040722
        US 2003-516926P      20031103 (60)
DT      Utility
FS      APPLICATION
LREP    FINNEGAN, HENDERSON, FARABOW,, GARRETT & DUNNER, L.L.P., Stanford
        Research Park, 700 Hansen Way, Palo Alto, CA, 94304-1016, US
CLMN    Number of Claims: 83
ECL     Exemplary Claim: 1
DRWN    No Drawings
LN.CNT 1882
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB      Oligosaccharide mixtures comprising anti-Xa activities of from 190 IU/mg
        to 450 IU/mg and anti-IIa activities of less than 0.2 IU/mg; and having
        constituent oligosaccharides with an average molecular weight of from
        1800 to 2400 Daltons, constituent oligosaccharides comprise from 2 to 16
        saccharide units, a 4,5-unsaturated uronic acid
        2-O-sulfate unit at one end, and comprising at least one
        ΔIIa-IIs-Is hexasaccharide sequence are described. Processes for
        preparing the oligosaccharide mixtures, pharmaceutical compositions and
        articles of manufacture comprising the oligosaccharide mixtures are
        described. Methods of treatment and prevention comprising administering
        the oligosaccharide mixtures are described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4    ANSWER 9 OF 39  USPATFULL on STN
AN      2005:43648  USPATFULL
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TI      2-O sulfatase compositions and related methods
IN      Sasisekharan, Ram, Lincoln, MA, UNITED STATES
        Myette, James R., Belmont, MA, UNITED STATES
        Shriver, Zachary, Boston, MA, UNITED STATES
        Venkataraman, Ganesh, Waltham, MA, UNITED STATES
PA      Massachusetts Institute of Technology, Cambridge, MA (U.S. corporation)
PI      US 2005037376       A1   20050217
AI      US 2004-753761      A1   20040107 (10)
PRAI    JP 2003-271653       20030707
        US 2003-438810P      20030108 (60)
DT      Utility
FS      APPLICATION
LREP    WOLF GREENFIELD & SACKS, PC, FEDERAL RESERVE PLAZA, 600 ATLANTIC AVENUE,
        BOSTON, MA, 02210-2211
CLMN    Number of Claims: 33
ECL     Exemplary Claim: 1
DRWN    16 Drawing Page(s)
LN.CNT 4010
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB      The invention relates to 2-O sulfatase and uses thereof. In particular,
        the invention relates to recombinantly produced 2-O sulfatase,
        functional variants and nucleic acid molecules that encode these
        molecules. The invention also provides methods of using 2-O sulfatase
        for a variety of purposes, including degrading and analyzing
        glycosaminoglycans (GAGs) present in a sample. For instance, 2-O
        sulfatase may be used for determining the purity, identity, composition
        and sequence of glycosaminoglycans present in a sample. The invention
        also relates to methods of inhibiting angiogenesis and cellular
        proliferation as well as methods for treating cancer, neurodegenerative
        disease, atherosclerosis and microbial infection using 2-O sulfatase
        and/or GAG fragments produced by degradation with 2-O sulfatase.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4    ANSWER 10 OF 39  USPATFULL on STN
AN      2004:327322  USPATFULL
TI      Products and methods
IN      Chai, Wengang, Harrow, UNITED KINGDOM
        Feizi, Ten, Harrow, UNITED KINGDOM
        Lawson, Alexander, Harrow, UNITED KINGDOM
PA      Imperial College Innovations Limited, London, UNITED KINGDOM (non-U.S.
        corporation)
PI      US 2004259142       A1   20041223
AI      US 2004-855072      A1   20040527 (10)
PRAI    US 2003-475625P      20030604 (60)
DT      Utility
FS      APPLICATION
LREP    NIKOLAI & MERSEREAU, P.A., 900 SECOND AVENUE SOUTH, SUITE 820,
        MINNEAPOLIS, MN, 55402
CLMN    Number of Claims: 41
ECL     Exemplary Claim: CLM-01-72
DRWN    13 Drawing Page(s)
LN.CNT 2250
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB      An array of reducing end-tagged carbohydrate molecules immobilised on a
        support. The reducing end-tagged carbohydrate molecules may be
        neoglycolipids or glycolipids. The reducing end-tagged carbohydrate
        molecule may have a carbohydrate which is an oligosaccharide,
        monosaccharide, an N-glycan, or an O-glycan. The array may comprise one
        or more samples of reducing end-tagged carbohydrate molecules which
        comprise a homogeneous sample of carbohydrate or a heterogeneous sample
        of carbohydrate. The carbohydrate may be derived from a microbe, a
        specific cell type, a specific tissue or organ, an animal, for example a
        human, or a plant.
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       A method of determining whether a molecule interacts with a carbohydrate
       comprising: i) contacting an array according to the invention with the
       molecule; and ii) measuring whether the molecule binds to any of the
       arrayed reducing end-tagged carbohydrate molecule.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4   ANSWER 11 OF 39  USPATFULL on STN
AN     2004:222046  USPATFULL
TI     Mixtures of polysaccharides derived from heparin, their
       preparation and pharmaceutical compositions containing them
IN     Viskov, Christian, Ris Orangis, FRANCE
PA     Aventis Pharma S.A., Antony, FRANCE (non-U.S. corporation)
PI     US 2004171819      A1   20040902
AI     US 2003-680934     A1   20031008 (10)
PRAI   FR 2002-12584          20021010
       US 2002-430095P        20021202 (60)
DT     Utility
FS     APPLICATION
LREP   FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, LLP, 1300 I STREET, NW,
       WASHINGTON, DC, 20005
CLMN   Number of Claims: 53
ECL    Exemplary Claim: 1
DRWN   No Drawings
LN.CNT 1656
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB     The present invention relates to mixtures of polysaccharides
       derived from heparin having a mean molecular weight of 1500 to 3000
       Daltons and an anti-Xa/anti-IIa ratio greater than 30, their method of
       preparation and pharmaceutical compositions containing them.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4   ANSWER 12 OF 39  USPATFULL on STN
AN     2004:171982  USPATFULL
TI     Targeted glycosaminoglycan polymers by polymer grafting and methods of
       making and using same
IN     DeAngelis, Paul L., Edmond, OK, UNITED STATES
       Jing, Wei, Edmond, OK, UNITED STATES
PI     US 2004132143      A1   20040708
AI     US 2003-642248     A1   20030815 (10)
RLI    Continuation-in-part of Ser. No. US 2002-195908, filed on 15 Jul 2002,
       PENDING Continuation-in-part of Ser. No. US 1999-437277, filed on 10 Nov
       1999, GRANTED, Pat. No. US 6444447 Continuation-in-part of Ser. No. US
       1999-283402, filed on 1 Apr 1999, ABANDONED Continuation-in-part of Ser.
       No. US 2001-842484, filed on 25 Apr 2001, PENDING Continuation-in-part
       of Ser. No. US 2002-142143, filed on 8 May 2002, PENDING
PRAI   US 2002-404356P        20020816 (60)
       US 2003-479432P        20030618 (60)
       US 1998-107929P        19981111 (60)
       US 1998-80414P         19980402 (60)
       US 2000-199538P        20000425 (60)
       US 2001-289554P        20010508 (60)
DT     Utility
FS     APPLICATION
LREP   DUNLAP, CODDING & ROGERS P.C., PO BOX 16370, OKLAHOMA CITY, OK, 73113
CLMN   Number of Claims: 111
ECL    Exemplary Claim: 1
DRWN   41 Drawing Page(s)
LN.CNT 8221
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB     The present invention relates to methodology for polymer grafting by a
       polysaccharide synthase and, more particularly, polymer grafting
       using the hyaluronate or chondroitin or heparin/heparosan synthases from
       Pasteurella, in order to create a variety of glycosaminoglycan
       oligosaccharides having a natural or chimeric or hybrid sugar structure
       with a targeted size that are substantially monodisperse in size.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4   ANSWER 13 OF 39  USPATFULL on STN
AN      2004:120627  USPATFULL
TI      Novel method for sequence determination using NMR
IN      Sasisekharan, Ram, Cambridge, MA, UNITED STATES
        Venkataraman, Ganesh, Bedford, MA, UNITED STATES
        Raman, Rahul, Cambridge, MA, UNITED STATES
        Casu, Benito, Milano, ITALY
        Torri, Giangiacomo, Milano, ITALY
        Guerrini, Marco, Saronno, ITALY
PI      US 2004092037       A1   20040513
AI      US 2003-441970      A1   20030520 (10)
PRAI    US 2002-381940P      20020520 (60)
DT      Utility
FS      APPLICATION
LREP    Janice A. Vatland, Ph.D., Wolf, Greenfield & Sacks, P.C., 600 Atlantic
        Avenue, Boston, MA, 02210
CLMN    Number of Claims: 28
ECL     Exemplary Claim: 1
DRWN    3 Drawing Page(s)
LN.CNT 1095
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB      The invention relates to methods for analyzing polysaccharides
        . In particular, compositional and sequence information about the
        polysaccharides are derived. Some methods use NMR in conjunction
        with another experimental method, such as, capillary electrophoretic
        techniques for the analysis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4   ANSWER 14 OF 39  USPATFULL on STN
AN      2004:114697  USPATFULL
TI      Methods and products for mucosal delivery
IN      Shriver, Zachary, Boston, MA, UNITED STATES
        Venkataraman, Ganesh, Bedford, MA, UNITED STATES
        Sundaram, Mallikarjun, Ashland, MA, UNITED STATES
        Sasisekharan, Ram, Cambridge, MA, UNITED STATES
        Richardson, Thomas, South Boston, MA, UNITED STATES
        Qi, Yiwei, Charlestown, MA, UNITED STATES
PI      US 2004087543       A1   20040506
AI      US 2003-423725      A1   20030425 (10)
PRAI    US 2002-375927P      20020425 (60)
        US 2002-375970P      20020425 (60)
        US 2002-383926P      20020528 (60)
        US 2002-393959P      20020705 (60)
        US 2003-446432P      20030210 (60)
DT      Utility
FS      APPLICATION
LREP    FISH & RICHARDSON PC, 225 FRANKLIN ST, BOSTON, MA, 02110
CLMN    Number of Claims: 234
ECL     Exemplary Claim: 1
DRWN    7 Drawing Page(s)
LN.CNT 4010
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB      The invention features methods and products associated with non-invasive
        delivery of polysaccharide preparations.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
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L4   ANSWER 15 OF 39  USPATFULL on STN
AN      2003:288627  USPATFULL
TI      Analysis of sulfated polysaccharides
IN      Venkataraman, Ganesh, Bedford, MA, UNITED STATES
        Shriver, Zachary, Boston, MA, UNITED STATES
        Sundaram, Malikarjun, Ashland, MA, UNITED STATES
        QI, Yi-Wei, Charlestown, MA, UNITED STATES
        Sasisekharan, Ram, Cambridge, MA, UNITED STATES
PI      US 2003203385       A1   20031030
AI      US 2003-386402      A1   20030311 (10)
PRAI    US 2002-393973P      20020705 (60)
        US 2002-383903P      20020528 (60)
        US 2002-363240P      20020311 (60)
DT      Utility
FS      APPLICATION
LREP    FISH & RICHARDSON PC, 225 FRANKLIN ST, BOSTON, MA, 02110
CLMN    Number of Claims: 330
ECL     Exemplary Claim: 1
DRWN    12 Drawing Page(s)
LN.CNT 5004
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB      The invention relates to methods and products associated with analyzing
        and monitoring heterogeneous populations of sulfated
        polysaccharides. In particular therapeutic heparin
        products including low molecular weight heparin products and
        methods of analyzing and monitoring these products are described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4   ANSWER 16 OF 39  USPATFULL on STN
AN      2003:183977  USPATFULL
TI      Sequence analysis of saccharide material
IN      Gallagher, John Thomas, Cheshire, UNITED KINGDOM
        Turnbull, Jeremy Ewan, Kidderminster, UNITED KINGDOM
        Hopwood, John Joseph, Stonyfell, AUSTRALIA
PA      Cancer Research Technology Limited, London, UNITED KINGDOM (non-U.S.
        corporation)
PI      US 6589757          B1   20030708
        WO 9613606  19960509
AI      US 1997-836399           19971020 (8)
        WO 1995-GB2541           19951030
PRAI    GB 1994-21819        19941029
DT      Utility
FS      GRANTED
EXNAM   Primary Examiner: Gitomer, Ralph
LREP    Pillsbury Winthrop LLP
CLMN    Number of Claims: 18
ECL     Exemplary Claim: 1
DRWN    4 Drawing Figure(s); 3 Drawing Page(s)
LN.CNT 980
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB      A method of analyzing and sequencing saccharide material composed of
        saccharide chains. The saccharide chains are end referenced, e.g., by
        labeling or tagging at their reducing ends, and the saccharide material
        is subjected to a controlled partial depolymerisation using a selection
        scission reagent, for example, low pH nitrous acid, which cleaves
        internal glycosidic linkages in accordance with known linkage
        specificity so as to produce a mixed set of saccharide chain fragments
        having different lengths ranging throughout the full spectrum of
        possible lengths for the particular glycosidic linkage specificity of
        the selective scission reagent employed. Samples of the mixed set of
        saccharide chain fragments are then treated with selected exoenzymes
        including exoglycosidases that cleave only particular glycosidic
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       linkages at the non-reducing end of saccharide chains. These exoenzymes
       are applied to the samples either singly or in combination in accordance
       with a predetermined strategy. The treated samples are then analyzed, to
       detect the chain fragments present which have a reducing end derived
       from the reducing end of the corresponding chain in the original
       saccharide material and the monosaccharide sequence in the saccharide
       starting material is then deduced.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4   ANSWER 17 OF 39  USPATFULL on STN
AN     2002:217251  USPATFULL
TI     Method for treating occlusive peripheral vascular disease and coronary
       disease
IN     Barron, Hal V., San Francisco, CA, United States
       Botvinick, Elias, San Rafael, CA, United States
PA     The Regents of the University of California, Oakland, CA, United States
       (U.S. corporation)
PI     US 6440947          B1   20020827
AI     US 1998-167816           19981007 (9)
RLI    Continuation-in-part of Ser. No. US 1997-946196, filed on 7 Oct 1997
DT     Utility
FS     GRANTED
EXNAM  Primary Examiner: Richter, Johann; Assistant Examiner: Owens, Howard
LREP   Burns, Doane, Swecker & Mathis LLP
CLMN   Number of Claims: 16
ECL    Exemplary Claim: 1
DRWN   0 Drawing Figure(s); 0 Drawing Page(s)
LN.CNT 1289
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB     Compositions and methods for treatment of occlusive peripheral vascular
       disease and coronary disease are disclosed. The compositions and methods
       allow treatment of diseases associated with occlusion of coronary
       vessels, for example, by promoting growth of new blood vessels, i.e.,
       angiogenesis and/or by recruitment of collaterals. The methods involve
       the co-administration of an adenosine A.sub.2 receptor agonist, e.g.,
       adenosine, and heparin and/or a heparin-like substance over a period of
       several days. In particular, this invention is applicable to improving
       collateral coronary circulation in patients suffering from myocardial
       infarction.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4   ANSWER 18 OF 39  USPATFULL on STN
AN     2002:206634  USPATFULL
TI     FGF-affinity chromatography
IN     McKeehan, Wallace L., Bellaire, TX, UNITED STATES
       Luo, Yongde, Houston, TX, UNITED STATES
PI     US 2002111331       A1   20020815
       US 6812221          B2   20041102
AI     US 2001-990578      A1   20011121 (9)
PRAI   US 2000-252225P     20001121 (60)
       US 2001-277735P     20010321 (60)
       US 2001-325613P     20010928 (60)
       US 2001-325502P     20010928 (60)
DT     Utility
FS     APPLICATION
LREP   HOWREY SIMON ARNOLD & WHITE, LLP, 750 Bering Drive, Houston, TX,
       77057-2198
CLMN   Number of Claims: 48
ECL    Exemplary Claim: 1
DRWN   9 Drawing Page(s)
LN.CNT 2024
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
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AB     The present invention relates to a method and apparatus for isolating
       anticoagulant heparin or heparan sulfate by binding the anticoagulant
       heparin or anticoagulant heparan sulfate onto an affinity matrix and
       separating the non-bound material from the bound material. The affinity
       matrix is made of a fibroblast growth factor immobilized on a support.
       The invention also relates to a method and composition for neutralizing
       anticoagulation catalyzed by heparin, a heparin mimic, or a heparin
       derivative, by contacting heparin, a heparin mimic, or a heparin
       derivative with a fibroblast growth factor.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4   ANSWER 19 OF 39  USPATFULL on STN
AN     2002:126294  USPATFULL
TI     Methods and compositions for glycosidase assays
IN     Pillarisetti, Sivaram, Norcross, GA, UNITED STATES
       Saxena, Uday, Atlanta, GA, UNITED STATES
       Wang, Dongyan, Norcross, GA, UNITED STATES
PI     US 2002064806       A1   20020530
       US 6656699          B2   20031202
AI     US 2001-952648      A1   20010914 (9)
PRAI   US 2000-233075P      20000915 (60)
DT     Utility
FS     APPLICATION
LREP   Mary Anthony Merchant, Ph.D, KILPATRICK STOCKTON LLP, Suite 2800, 1100
       Peachtree Street, Atlanta, GA, 30309-4530
CLMN   Number of Claims: 20
ECL    Exemplary Claim: 1
DRWN   7 Drawing Page(s)
LN.CNT 741
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB     The present invention is directed to compositions and methods for
       measuring enzymatic activity, particularly glycosidase activity. Methods
       of the present invention include assays for quantitatively determining
       the amount of glycosidase activity in a sample. The present invention
       also provides methods for the diagnosis of metastatic and inflammatory
       processes in vitro and in vivo. The present invention further provides
       compositions and methods for high throughput assays for identifying
       compounds that effect glycosidase activity.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4   ANSWER 20 OF 39  USPATFULL on STN
AN     2001:188702  USPATFULL
TI     Apoptosis inducers
IN     Sakai, Takeshi, Hirosaki-shi, Japan
       Kitano, Hideo, Hirosaki-shi, Japan
       Yu, Fu-Gong, Hirosaki-shi, Japan
       Nakayama, Shinji, Hirosaki-shi, Japan
       Kojima, Kaoru, Hirosaki-shi, Japan
       Kimura, Hitomi, Hirosaki-shi, Japan
       Nakanishi, Yoshikuni, Hirosaki-shi, Japan
       Katayama, Kaoru, Hirosaki-shi, Japan
       Tominaga, Takanari, Otsu-shi, Japan
       Shimanaka, Kazuo, Otsu-shi, Japan
       Ikai, Katsushige, Otsu-shi, Japan
       Kato, Ikunoshin, Hirosaki-shi, Japan
PI     US 2001034335       A1   20011025
       US 6593311          B2   20030715
AI     US 2001-770504      A1   20010129 (9)
RLI    Division of Ser. No. US 1998-51284, filed on 9 Apr 1998, GRANTED, Pat.
       No. US 6207652 A 371 of International Ser. No. WO 1997-JP116, filed on
       21 Jan 1997, UNKNOWN
PRAI   JP 1996-31187        19960126
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       JP 1996-45583       19960208
       JP 1996-45593       19960208
       JP 1996-171658      19960612
       JP 1996-204187      19960716
DT     Utility
FS     APPLICATION
LREP   WENDEROTH, LIND & PONACK, L.L.P., 2033 "K" Street, N.W., Suite 800,
       Washington, DC, 20006
CLMN   Number of Claims: 40
ECL    Exemplary Claim: 1
DRWN   33 Drawing Page(s)
LN.CNT 4368
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB     Apoptosis inducers, anticancer drugs and carcinostatic drugs containing
       sulfated-fucose-containing polysaccharide(s) and/or
       degradation product(s) thereof, and a method for inducing apoptosis by
       using sulfated-fucose-containing polysaccharide(s) and/or
       degradation product(s) thereof as the active ingredient. A degrading
       enzyme which is useful in the production of the degradation products of
       sulfated-fucose-containing polysaccharides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4   ANSWER 21 OF 39  USPATFULL on STN
AN     2001:75378  USPATFULL
TI     Methods and compositions for the prevention of tolerance to medications
IN     Ahmed, Tahir, Coral Gables, FL, United States
PA     Baker Norton Pharmaceuticals, Inc., Miami, FL, United States (U.S.
       corporation)
PI     US 6235725          B1   20010522
AI     US 1999-362540           19990728 (9)
PRAI   US 1998-106507P     19981030 (60)
DT     Utility
FS     Granted
EXNAM  Primary Examiner: Peselev, Elli
LREP   Levi-Minzi, Simona A.
CLMN   Number of Claims: 35
ECL    Exemplary Claim: 1
DRWN   2 Drawing Figure(s); 2 Drawing Page(s)
LN.CNT 985
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB     The present invention pertains to the identification of moieties and
       methods of using the same for preventing tolerance to bronchodilators.
       More specifically, the present invention pertains to the identification
       of compositions and methods which are capable of preventing tolerance to
       β.sub.2 -adrenergic agonists. The methods and compositions
       according to the invention are also useful as analytical tools for
       functional studies and as combination therapeutic tools.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4   ANSWER 22 OF 39  USPATFULL on STN
AN     2001:44210  USPATFULL
TI     Apoptosis inducers
IN     Sakai, Takeshi, Hirosaki, Japan
       Kitano, Hideo, Hirosaki, Japan
       Yu, Fu-Gong, Hirosaki, Japan
       Nakayama, Shinji, Hirosaki, Japan
       Kojima, Kaoru, Hirosaki, Japan
       Kimura, Hitomi, Hirosaki, Japan
       Nakanishi, Yoshikuni, Hirosaki, Japan
       Katayama, Kaoru, Hirosaki, Japan
       Tominaga, Takanari, Otsu, Japan
       Shimanaka, Kazuo, Otsu, Japan
       Ikai, Katsushige, Otsu, Japan
       Kato, Ikunoshin, Hirosaki, Japan
PA     Takara Shuzo Co., Ltd., Kyoto, Japan (non-U.S. corporation)
       Research Institute for Glycotechnology, Aomori, Japan (non-U.S.
       corporation)
PI     US 6207652         B1   20010327
       WO 9726896  19970731
AI     US 1998-51284           19980409 (9)
       WO 1997-JP116           19970121
                               19980409  PCT 371 date
                               19980409  PCT 102(e) date
PRAI   JP 1996-31187       19960126
       JP 1996-45583       19960208
       JP 1996-45593       19960208
       JP 1996-171658      19960612
       JP 1996-204187      19960716
DT     Utility
FS     Granted
EXNAM  Primary Examiner: Fonda, Kathleen K.
LREP   Wenderoth, Lind & Ponack, L.L.P.
CLMN   Number of Claims: 21
ECL    Exemplary Claim: 1
DRWN   33 Drawing Figure(s); 33 Drawing Page(s)
LN.CNT 4129
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB     Apoptosis inducers, anticancer drugs and carcinostatic drugs containing
       sulfated-fucose-containing polysaccharide(s) and/or
       degradation product(s) thereof, and a method for inducing apoptosis by
       using sulfated-fucose-containing polysaccharide(s) and/or
       degradation product(s) thereof as the active ingredient. A degrading
       enzyme which is useful in the production of the degradation products of
       sulfated-fucose-containing polysaccharides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4   ANSWER 23 OF 39  USPATFULL on STN
AN     1999:78695  USPATFULL
TI     Dermatan disulfate, an inhibitor of thrombin generation and activation
IN     Van Gorp, Cornelius L., 8439 Point O'Woods, Springboro, OH, United
       States  45066
       Brister, Stephanie J., 151 Kent Street, Hamilton, Ontario, Canada
       Buchanan, Michael R., 151 Kent Street, Hamilton, Ontario, Canada  L8P
       3Z2
       Linhardt, Robert J., 1422 Plum St., Iowa City, IA, United States  52440
PI     US 5922690              19990713
AI     US 1997-795099          19970206 (8)
PRAI   US 1996-16218P      19960425 (60)
DT     Utility
FS     Granted
EXNAM  Primary Examiner: Fonda, Kathleen K.
LREP   Smith, Mark F., Guttag, Eric W.Smith, Knochelmann, Freese & Guttag
CLMN   Number of Claims: 46
ECL    Exemplary Claim: 1
DRWN   7 Drawing Figure(s); 7 Drawing Page(s)
LN.CNT 1406
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB     A method of inhibiting thrombin generation and of inhibiting complement
       activation by using a dermatan sulfate having at least 2 sulfate groups
       per disaccharide obtained by chemical sulfation of native dermatan
       sulfate. The resulting dermatan sulfate having an average molecular
       weight from about 5000 to 35000 Daltons is characterized by (i) a high
       content of L-iduronic->4,6-di-O-sulfated N-acetyl-D-
       galactosamine residues, and (ii) a specific heparin cofactor
       II-mediated anti-thrombin activity, depending on average molecular
       weight, between about 25 to 125 U/mg.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4   ANSWER 24 OF 39  USPATFULL on STN
AN       1998:112092  USPATFULL
TI       Method for controlling O-desulfation of heparin
IN       Holme, Kevin R., Alameda, CA, United States
         Liang, Weisheng, San Francisco, CA, United States
         Tyrrell, David J., Alameda, CA, United States
         Shaklee, Patrick N., Waunakee, WI, United States
PA       Glycomed Incorporated, Alameda, CA, United States (U.S. corporation)
PI       US 5808021                19980915
AI       US 1997-835733            19970410 (8)
RLI      Division of Ser. No. US 1995-384298, filed on 6 Feb 1995, now patented,
         Pat. No. US 5696100 which is a continuation of Ser. No. US 1994-300291,
         filed on 1 Sep 1994, now abandoned which is a continuation-in-part of
         Ser. No. US 1994-210847, filed on 21 Mar 1994, now abandoned which is a
         continuation-in-part of Ser. No. US 1992-994804, filed on 22 Dec 1992,
         now patented, Pat. No. US 5296471, issued on 22 Mar 1994
DT       Utility
FS       Granted
EXNAM    Primary Examiner: Lilling, Herbert J.
LREP     Lyon & Lyon LLP
CLMN     Number of Claims: 4
ECL      Exemplary Claim: 1
DRWN     5 Drawing Figure(s); 3 Drawing Page(s)
LN.CNT 1362
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB       Methods of making and using, as prophylactics or therapeutics for
         preventing or treating certain diseases including cancer, O-desulfated
         heparin compositions, preferably 2-O, 3-O desulfated heparin
         compositions, wherein the methods permit regulating the degree of 2-O,
         3-O desulfation to produce compositions that are variably desulfated
         upto about 99% and 75% desulfated at the 2-O and 3-O positions,
         respectively.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4   ANSWER 25 OF 39  USPATFULL on STN
AN       1998:38172  USPATFULL
TI       Oligosaccharides having anti-Xa activity and pharmaceutical compositions
         containing them
IN       Lormeau, Jean Claude, Maromme-la-Maine, France
         Petitou, Maurice, Paris, France
         Choay, deceased, Jean, late of Paris, France  by Fra.cedilla. oise
         Choay, Pauline Choay, Corinne Choay-Verdet, heirs
PA       Choay, S.A., Paris, France (non-U.S. corporation)
PI       US 35770                  19980414
         US 4401662                19830830 (Original)
AI       US 1995-574761            19951219 (8)
         US 1980-194545            19801006 (Original)
RLI      Continuation-in-part of Ser. No. US 1979-91164, filed on 5 Nov 1979, now
         abandoned
PRAI     FR 1978-31357        19781106
         FR 1979-18873        19790720
         GB 1979-34673        19791005
         GB 1980-443          19800107
         GB 1980-21749        19800702
         GB 1980-21750        19800702
         GB 1980-29697        19800915
DT       Reissue
FS       Granted
EXNAM    Primary Examiner: Fonda, Kathleen K.
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LREP   Kenyon & Kenyon
CLMN   Number of Claims: 16
ECL    Exemplary Claim: 1
DRWN   6 Drawing Figure(s); 6 Drawing Page(s)
LN.CNT 1078
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB     Oligosaccharides obtainable from heparin including heparinic
       constituents of molecular weights ranging from 2000 to 50,000. Said
       fractions have a Yin-Wessler titer and a USP titer in a ratio of at
       least 30. They consist of chains constituted by no more than 8
       saccharidic moities. They possess a strong antithrombotic activity and
       are then useful as antithrombotic drugs.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4   ANSWER 26 OF 39  USPATFULL on STN
AN     97:115260  USPATFULL
TI     Method for controlling O-desulfation of heparin and compositions
       produced thereby
IN     Holme, Kevin R., Alameda, CA, United States
       Liang, Weisheng, San Francisco, CA, United States
       Shaklee, Patrick N., Waunakee, WI, United States
PA     Glycomed Incorporated, Alameda, CA, United States (U.S. corporation)
PI     US 5696100              19971209
AI     US 1995-384298          19950206 (8)
RLI    Continuation of Ser. No. US 1994-300291, filed on 1 Sep 1994, now
       abandoned which is a continuation-in-part of Ser. No. US 1994-210847,
       filed on 21 Mar 1994, now abandoned which is a continuation-in-part of
       Ser. No. US 1992-994804, filed on 22 Dec 1992, now patented, Pat. No. US
       5296471, issued on 22 Mar 1994
DT     Utility
FS     Granted
EXNAM  Primary Examiner: Lilling, Herbert J.
LREP   Lyon & Lyon LLP
CLMN   Number of Claims: 12
ECL    Exemplary Claim: 1
DRWN   5 Drawing Figure(s); 3 Drawing Page(s)
LN.CNT 1385
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB     Methods of making and using, as prophylactics or therapeutics for
       preventing or treating certain diseases including cancer, O-desulfated
       heparin compositions, preferably 2-O, 3-O desulfated heparin
       compositions, wherein the methods permit regulating the degree of 2-O,
       3-O desulfation to produce compositions that are variably desulfated
       upto about and 75% desulfated at the 2-O and 3-O positions,
       respectively.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4   ANSWER 27 OF 39  USPATFULL on STN
AN     96:99154  USPATFULL
TI     Purification, composition and specificity of heparinase I, II, and III
       from flavobacterium heparinum
IN     Sasisekharan, Ramnath, Arlington, MA, United States
       Lohse, Daniel L., Bryan, TX, United States
       Cooney, Charles L., Brookline, MA, United States
       Linhardt, Robert J., Iowa City, IA, United States
       Langer, Robert S., Newton, MA, United States
PA     Massachusetts Institute of Technology, Iowa City, IA, United States
       (U.S. corporation)
       University of Iowa Research Foundation, Cambridge, MA, United States
       (U.S. corporation)
PI     US 5569600              19961029
AI     US 1995-378789          19950126 (8)
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RLI    Division of Ser. No. US 1992-983367, filed on 30 Nov 1992, now patented,
       Pat. No. US 5389539
DT     Utility
FS     Granted
EXNAM  Primary Examiner: Rollins, John W.; Assistant Examiner: Ware, Deborah K.
LREP   Arnall Golden & Gregory
CLMN   Number of Claims: 2
ECL    Exemplary Claim: 1
DRWN   12 Drawing Figure(s); 5 Drawing Page(s)
LN.CNT 1379
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB     A single, reproducible scheme to simultaneously purify all three of the
       heparin lyases from F. heparinum to apparent homogeneity is disclosed
       herein. The kinetic properties of the heparin lyases have been
       determined as well as the conditions to optimize their activity and
       stability. Monoclonal antibodies to the three heparinases are also
       described and are useful for detection, isolation and characterization
       of the heparinases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4    ANSWER 28 OF 39  USPATFULL on STN
AN     96:53300  USPATFULL
TI     Selectin receptor modulating compositions
IN     Bevilacqua, Michael P., San Diego, CA, United States
       Nelson, Richard M., San Diego, CA, United States
       Linhardt, Robert J., Iowa City, IA, United States
PA     The Regents of the University of California, Oakland, CA, United States
       (U.S. corporation)
PI     US 5527785               19960618
AI     US 1993-89076            19930707 (8)
RLI    Continuation-in-part of Ser. No. US 1993-62957, filed on 14 May 1993,
       now abandoned
DT     Utility
FS     Granted
EXNAM  Primary Examiner: Robinson, Douglas W.; Assistant Examiner: Fonda,
       Kathleen Kahler
LREP   Fish & Richardson
CLMN   Number of Claims: 7
ECL    Exemplary Claim: 1
DRWN   10 Drawing Figure(s); 11 Drawing Page(s)
LN.CNT 683
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB     Selectin receptor binding is modulated by a method which utilizes
       heparin-like oligosaccharides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4    ANSWER 29 OF 39  USPATFULL on STN
AN     95:13772  USPATFULL
TI     Purification of heparinase I, II, and III from Flavobacterium heparinum
IN     Sasisekharan, Ramnath, Arlington, MA, United States
       Lohse, Daniel L., Bryan, TX, United States
       Cooney, Charles L., Brookline, MA, United States
       Linhardt, Robert J., Iowa City, IA, United States
       Langer, Robert S., Newton, MA, United States
PA     Massachusetts Institute of Technology, Cambridge, MA, United States
       (U.S. corporation)
       University of Iowa Research Foundation, Iowa City, IA, United States
       (U.S. corporation)
PI     US 5389539               19950214
AI     US 1992-983367           19921130 (7)
DT     Utility
FS     Granted
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EXNAM   Primary Examiner: Naff, David M.; Assistant Examiner: Ware, Deborah K.
LREP    Kilpatrick & Cody
CLMN    Number of Claims: 8
ECL     Exemplary Claim: 1
DRWN    12 Drawing Figure(s); 5 Drawing Page(s)
LN.CNT 1400
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB      A purified heparinase I, II and III free of lyase activity and each
        having a molecular weight of 42,800 84,100, 70,800, respectively, are
        produced by culturing Flavobacterium heparinum. The kinetic properties
        of the heparinases have been determined as well as the conditions to
        optimize their activity and stability.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4    ANSWER 30 OF 39  USPATFULL on STN
AN      93:24831  USPATFULL
TI      Purification of glycosaminoglycan degrading enzymes with a sulfated
        polysaccharide
IN      Kikuchi, Hiroshi, Saitama, Japan
        Maeyama, Ken-ichi, Tokyo, Japan
        Yoshida, Keiichi, Tokyo, Japan
PA      Seikagaku Kogyo Co., Ltd., Tokyo, Japan (non-U.S. corporation)
PI      US 5198355                19930330
AI      US 1989-397942            19890824 (7)
PRAI    JP 1988-208154        19880824
DT      Utility
FS      Granted
EXNAM   Primary Examiner: Naff, David M.; Assistant Examiner: Meller, Mike
LREP    Sughrue, Mion, Zinn, Macpeak & Seas
CLMN    Number of Claims: 14
ECL     Exemplary Claim: 1
DRWN    2 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 453
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB      Glycosaminoglycan degrading enzymes are fractionated and purified by
        chromatographically treating a solution containing the enzymes with an
        insoluble sulfated polysaccharide carrier. The enzymes are
        adsorbed onto the carrier and then subsequently desrobed from the
        carrier.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4    ANSWER 31 OF 39  USPATFULL on STN
AN      91:36407  USPATFULL
TI      Process for the sulfation of glycosaminoglycans, the sulfated
        glycosaminoglycans and their biological applications
IN      Petitou, Maurice, Paris Cedex, France
        Choay, Jean, Paris, France
PA      Sanofi Societe Anonyme, Paris, France (non-U.S. corporation)
PI      US 5013724                19910507
AI      US 1986-884404            19860711 (6)
DT      Utility
FS      Granted
EXNAM   Primary Examiner: Griffin, Ronald W.; Assistant Examiner: Carson, Nancy
        S.
LREP    Davis Hoxie Faithfull & Hapgood
CLMN    Number of Claims: 69
ECL     Exemplary Claim: 1,34,59
DRWN    5 Drawing Figure(s); 5 Drawing Page(s)
LN.CNT 1624
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB      According to the process of the invention, a glycosaminoglycan is used
        in the form of a salt soluble in an organic medium and is subjected to
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       the action of a given sulfation agent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4   ANSWER 32 OF 39  USPATFULL on STN
AN      84:55301  USPATFULL
TI      Oligosaccharides having anti-Xa activity, pharmaceutical compositions
        containing them and method of use
IN      Lormeau, Jean-Claude, Maromme la Maine, France
        Choay, Jean, Paris, France
        Petitou, Maurice, Paris, France
PA      Choay S.A., Paris, France (non-U.S. corporation)
PI      US 4474770              19841002
AI      US 1983-525372          19830822 (6)
DCD     20000830
RLI     Continuation of Ser. No. US 1980-194545, filed on 6 Oct 1980, now
        patented, Pat. No. US 4401662
PRAI    GB 1979-34673       19791005
        GB 1980-443         19800107
        GB 1980-21749       19800702
        GB 1980-21750       19800702
        GB 1980-29697       19800915
DT      Utility
FS      Granted
EXNAM   Primary Examiner: Brown, Johnnie R.
LREP    Weiser & Stapler
CLMN    Number of Claims: 3
ECL     Exemplary Claim: 1,2
DRWN    No Drawings
LN.CNT 976
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB      Oligosaccharides obtainable from heparin including heparinic
        constituents of molecular weights ranging from 2000 to 50,000. Said
        fractions have a Yin-Wessler titer and a U.S.P. titer in a ratio of at
        least 30.

        They consist of chains constituted by no more than 8 saccharidic
        moities. They possess a strong antithrombotic activity and are then
        useful as antithrombotic drugs.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4   ANSWER 33 OF 39  USPATFULL on STN
AN      83:38484  USPATFULL
TI      Process for making oligosaccharides having anti-Xa activity and the
        resulting oligosaccharides
IN      Lormeau, Jean-Claude, Maromme La Maine, France
        Choay, Jean, Paris, France
        Petitou, Maurice, Paris, France
PA      Choay S.A., Paris, France (non-U.S. corporation)
PI      US 4401758              19830830
AI      US 1980-194544          19801006 (6)
RLI     Continuation-in-part of Ser. No. US 1979-91164, filed on 5 Nov 1979, now
        abandoned
PRAI    GB 1979-34673       19791005
        GB 1980-443         19800107
        GB 1980-21749       19800702
        GB 1980-21750       19800702
        GB 1980-29697       19800915
DT      Utility
FS      Granted
EXNAM   Primary Examiner: Brown, Johnnie R.
LREP    Weiser, Stapler & Spivak
CLMN    Number of Claims: 15
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ECL    Exemplary Claim: 1,5
DRWN   6 Drawing Figure(s); 6 Drawing Page(s)
LN.CNT 1046
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB     Oligosaccharides obtainable from heparin including heparinic
       constituents of molecular weights ranging from 2000 to 50,000. Said
       fractions have a Yin-Wessler titer and a USP titer in a ratio of at
       least 30.

       They consist of chains substituted by no more than 8 saccharidic
       moities. They possess a strong antithrombotic activity and are then
       useful as antithrombotic drugs.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4   ANSWER 34 OF 39  USPATFULL on STN
AN     83:38388  USPATFULL
TI     Oligosaccharides having anti-Xa activity and pharmaceutical compositions
       containing them
IN     Lormeau, Jean-Claude, Maromme la Maine, France
       Choay, Jean, Paris, France
       Petitou, Maurice, Paris, France
PA     Choay, S.A., Paris, France (non-U.S. corporation)
PI     US 4401662              19830830
AI     US 1980-194545          19801006 (6)
RLI    Continuation-in-part of Ser. No. US 1979-91164, filed on 5 Nov 1979, now
       abandoned
PRAI   GB 1979-34673        19791005
       GB 1980-443          19800107
       GB 1980-21749        19800702
       GB 1980-21750        19800702
       GB 1980-29697        19800915
DT     Utility
FS     Granted
EXNAM  Primary Examiner: Brown, Johnnie R.
LREP   Weiser, Stapler & Spivak
CLMN   Number of Claims: 16
ECL    Exemplary Claim: 1,12
DRWN   6 Drawing Figure(s); 6 Drawing Page(s)
LN.CNT 1022
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB     Oligosaccharides obtainable from heparin including heparinic
       constituents of molecular weights ranging from 2000 to 50,000. Said
       fractions have a Yin-Wessler titer and a USP titer in a ratio of at
       least 30. They consist of chains constituted by no more than 8
       saccharidic moities. They possess a strong antithrombotic activity and
       are then useful as antithrombotic drugs.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4   ANSWER 35 OF 39  USPAT2 on STN
AN     2002:206634  USPAT2
TI     FGF-affinity chromatography
IN     McKeehan, Wallace L., Bellaire, TX, United States
       Luo, Yongde, Houston, TX, United States
PA     The Texas A&M University System, College Station, TX, United States
       (U.S. corporation)
PI     US 6812221          B2   20041102
AI     US 2001-990578           20011121 (9)
PRAI   US 2000-252225P     20001121 (60)
       US 2001-277735P     20010321 (60)
       US 2001-325613P     20010928 (60)
       US 2001-325502P     20010928 (60)
DT     Utility
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FS     GRANTED
EXNAM  Primary Examiner: Wilson, James O.; Assistant Examiner: Henry, Michael
       C.
LREP   Howrey Simon Arnold & White, LLP
CLMN   Number of Claims: 14
ECL    Exemplary Claim: 1
DRWN   9 Drawing Figure(s); 9 Drawing Page(s)
LN.CNT 2115
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB     The present invention relates to a method and apparatus for isolating
       anticoagulant heparin or heparan sulfate by binding the anticoagulant
       heparin or anticoagulant heparan sulfate onto an affinity matrix and
       separating the non-bound material from the bound material. The affinity
       matrix is made of a fibroblast growth factor immobilized on a support.
       The invention also relates to a method and composition for neutralizing
       anticoagulation catalyzed by heparin, a heparin mimic, or a heparin
       derivative, by contacting heparin, a heparin mimic, or a heparin
       derivative with a fibroblast growth factor.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4   ANSWER 36 OF 39  USPAT2 on STN
AN     2002:126294  USPAT2
TI     Methods and compositions for glycosidase assays
IN     Pillarisetti, Sivaram, Norcross, GA, United States
       Saxena, Uday, Atlanta, GA, United States
       Wang, Dongyan, Norcross, GA, United States
PA     Reddy US Therapeutics, Inc., Norcross, GA, United States (U.S.
       corporation)
PI     US 6656699          B2   20031202
AI     US 2001-952648           20010914 (9)
PRAI   US 2000-233075P     20000915 (60)
DT     Utility
FS     GRANTED
EXNAM  Primary Examiner: Leary, Louise N.
LREP   Kilpatrick Stockton LLP
CLMN   Number of Claims: 20
ECL    Exemplary Claim: 1
DRWN   7 Drawing Figure(s); 7 Drawing Page(s)
LN.CNT 810
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB     The present invention is directed to compositions and methods for
       measuring enzymatic activity, particularly glycosidase activity. Methods
       of the present invention include assays for quantitatively determining
       the amount of glycosidase activity in a sample. The present invention
       also provides methods for the diagnosis of metastatic and inflammatory
       processes in vitro and in vivo. The present invention further provides
       compositions and methods for high throughput assays for identifying
       compounds that effect glycosidase activity.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4   ANSWER 37 OF 39  USPAT2 on STN
AN     2001:188702  USPAT2
TI     Apoptosis inducers
IN     Sakai, Takeshi, Hirosaki, JAPAN
       Kitano, Hideo, Hirosaki, JAPAN
       Yu, Fu-Gong, Hirosaki, JAPAN
       Nakayama, Shinji, Hirosaki, JAPAN
       Kojima, Kaoru, Hirosaki, JAPAN
       Kimura, Hitomi, Hirosaki, JAPAN
       Nakanishi, Yoshikuni, Hirosaki, JAPAN
       Katayama, Kaoru, Hirosaki, JAPAN
       Tominaga, Takanari, Otsu, JAPAN
       Shimanaka, Kazuo, Otsu, JAPAN
       Ikai, Katsushige, Otsu, JAPAN
       Kato, Ikunoshin, Hirosaki, JAPAN
PA     Takara Shuzo Co., Ltd., Kyoto, JAPAN (non-U.S. corporation)
       Research Institute for Glycotechnology, Aomori, JAPAN (non-U.S.
       corporation)
PI     US 6593311         B2   20030715
AI     US 2001-770504          20010129 (9)
RLI    Division of Ser. No. US 51284, now patented, Pat. No. US 6207652
PRAI   JP 1996-31187        19960126
       JP 1996-45583        19960208
       JP 1996-45593        19960208
       JP 1996-171658       19960612
       JP 1996-204187       19960716
DT     Utility
FS     GRANTED
EXNAM  Primary Examiner: Henley, III, Raymond
LREP   Wenderoth, Lind & Ponack, L.L.P.
CLMN   Number of Claims: 25
ECL    Exemplary Claim: 1
DRWN   34 Drawing Figure(s); 33 Drawing Page(s)
LN.CNT 4114
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB     Apoptosis inducers, anticancer drugs and carcinostatic drugs containing
       sulfated-fucose-containing polysaccharide(s) and/or
       degradation product(s) thereof, and a method for inducing apoptosis by
       using sulfated-fucose-containing polysaccharide(s) and/or
       degradation product(s) thereof as the active ingredient. A degrading
       enzyme which is useful in the production of the degradation products of
       sulfated-fucose-containing polysaccharides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4   ANSWER 38 OF 39  WPINDEX  COPYRIGHT 2006 THE THOMSON CORP on STN
AN   2004-332970 [31]   WPINDEX
DNC  C2004-125944
TI   New sulfated oligosaccharide mixtures having high anti-Xa and
     low anti-IIa activity, useful as antithrombotic agents, obtained by
     depolymerization of heparin using phosphazene base.
DC   B04
IN   BIBEROVIC, V; GRONDARD, L; MOURIER, P; VISKOV, C; BIBERVIC, V
PA   (AVET) AVENTIS PHARMA SA
CYC  105
PI   FR 2845686      A1 20040416 (200431)*      49
     WO 2004033503   A1 20040422 (200431)  FR
        RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS
            LU MC MW MZ NL OA PT SD SE SI SK SL SZ TR TZ UG ZM ZW
         W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
            DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
            KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PH PL
            PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA
            ZM ZW
     US 2004171819   A1 20040902 (200458)
     AU 2003300161   A1 20040504 (200465)
     NO 2005002170   A  20050707 (200548)
     EP 1556414      A1 20050727 (200549)  FR
         R: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV
            MC MK NL PT SE SI SK TR
     BR 2003015149   A  20050816 (200557)
     TW 2004018882   A  20041001 (200608)
     ZA 2005002787   A  20051228 (200612)       79
     MX 2005003321   A1 20050701 (200628)
     KR 2005061527   A  20050622 (200641)
     JP 2006517185   W  20060720 (200648)       40
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ADT  FR 2845686 A1 FR 2002-12584 20021010; WO 2004033503 A1 WO 2003-FR2960
     20031008; US 2004171819 A1 Provisional US 2002-430095P 20021202, US
     2003-680934 20031008; AU 2003300161 A1 AU 2003-300161 20031008; NO
     2005002170 A WO 2003-FR2960 20031008, NO 2005-2170 20050503; EP 1556414 A1
     EP 2003-807882 20031008, WO 2003-FR2960 20031008; BR 2003015149 A BR
     2003-15149 20031008, WO 2003-FR2960 20031008; TW 2004018882 A TW
     2003-128028 20031009; ZA 2005002787 A ZA 2005-2787 20050406; MX 2005003321
     A1 WO 2003-FR2960 20031008, MX 2005-3321 20050329; KR 2005061527 A WO
     2003-FR2960 20031008, KR 2005-706186 20050408; JP 2006517185 W WO
     2003-FR2960 20031008, JP 2004-542566 20031008
FDT  AU 2003300161 A1 Based on WO 2004033503; EP 1556414 A1 Based on WO
     2004033503; BR 2003015149 A Based on WO 2004033503; MX 2005003321 A1 Based
     on WO 2004033503; KR 2005061527 A Based on WO 2004033503; JP 2006517185 W
     Based on WO 2004033503
PRAI FR 2002-12584       20021010
AN   2004-332970 [31]    WPINDEX
AB   FR   2845686 A UPAB: 20040514
     NOVELTY - New mixtures (A) of heparin-derived sulfated
     polysaccharides have average molecular weight 1500-3000, anti-Xa
     activity 120-200 IU/mg, anti-IIa activity 0-10 IU/mg and ratio of anti-Xa
     to anti-IIa activity more than 30; comprise 2-26 saccharide units; have a
     4,5- unsaturated uronic acid 2-O-sulfate unit at one
     terminal; contain a specific hexasaccharide moiety designated Delta
     IIa-IIs-Is hexasaccharide; and are in alkali(ne earth) metal salt form.
          DETAILED DESCRIPTION - New mixtures (A) of sulfated
     polysaccharides have the general structure of the constitutive
     polysaccharides of heparin, an average molecular weight
     of 1500-3000, an anti-Xa activity of 120-200 IU/mg, an anti-IIa activity
     of 0-10 IU/mg and a ratio of anti-Xa to anti-IIa activity of more than 30.
     The constitutive oligosaccharides of (A) comprise 2-26 saccharide units;
     have a 4,5- unsaturated uronic acid 2-O-sulfate unit
     at one terminal; contain a hexasaccharide moiety of formula (I)
     (designated Delta IIa-IIs-Is hexasaccharide) and are in alkali(ne earth)
     metal salt form.
          An INDEPENDENT CLAIM is included for the preparation of (A).
          ACTIVITY - Thrombolytic; Anticoagulant; Antianginal; Cardiant;
     Neuroprotective; Antiarteriosclerotic.
          No biological data given.
          MECHANISM OF ACTION - Factor Xa antagonist.
          USE - (A) are used as medicaments, specifically antithrombotic
     agents, especially for the prevention or treatment of deep vein
     thrombosis, unstable angina or myocardial infarction (claimed). (A) are
     also useful for prevention or treatment of smooth muscle cell
     proliferation, as neuroprotectants and for combating atherosclerosis and
     arteriosclerosis.
          ADVANTAGE - (A) have stronger anti-Xa activity and higher selectivity
     for factor Xa relative to factor IIa than prior art heparin derivatives,
     and thus have a strong antithrombotic activity and no significant risk of
     hemorrhagic side-effects. In particular the Delta IIa-IIs-Is
     hexasaccharide component of (A) has strong ATIII affinity and an anti-Xa
     activity of more than 740 U/mg; and preparation of (A) by depolymerization
     of heparin using a phosphazene base in presence of a small amount of water
     retains the maximum content of this hexasaccharide.
     Dwg.0/0

L4   ANSWER 39 OF 39     MEDLINE on STN
AN   95238362      MEDLINE
DN   PubMed ID: 7721774
TI   Isolation of the porcine heparin tetrasaccharides with
     glucuronate 2-O-sulfate. Heparinase cleaves glucuronate
     2-O-sulfate-containing disaccharides in highly sulfated blocks
     in heparin.
AU   Yamada S; Murakami T; Tsuda H; Yoshida K; Sugahara K
CS   Department of Biochemistry, Kobe Pharmaceutical University, Japan.
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SO   The Journal of biological chemistry, (1995 Apr 14) Vol. 270, No. 15, pp.
     8696-705.
     Journal code: 2985121R. ISSN: 0021-9258.
CY   United States
DT   Journal; Article; (JOURNAL ARTICLE)
LA   English
FS   Priority Journals
EM   199505
ED   Entered STN: 5 Jun 1995
     Last Updated on STN: 6 Feb 1998
     Entered Medline: 19 May 1995
AB   Eleven tetrasaccharides were isolated from the repeating disaccharide
     region of porcine intestinal heparin after strong digestion with
     Flavobacterium heparinase.  Their structures were determined by
     composition analysis, enzymatic analysis, and 1H NMR spectroscopy.  Nine
     of them have the common tetrasaccharide backbone, delta HexA alpha 1-4GlcN
     alpha 1-4IdoA alpha 1-4GlcN, where delta HexA and IdoA represent
     4,5-unsaturated hexuronic acid and L-iduronic acid, respectively, and
     their structural variations are based upon the positions of sulfate
     groups.  The nine compounds include one hexasulfated, three pentasulfated
     and five tetrasulfated compounds, and four of them have not been isolated
     previously as discrete structures.  The other two of the 11
     tetrasaccharides have the following hitherto unreported structures with
     novel glucuronate 2-O-sulfate at the internal position: delta
     HexA(2-sulfate) alpha 1- 4GlcN(N,6-disulfate) alpha 1-4GlcA(2-sulfate)
     beta 1-4GlcN(N-sulfate) and delta HexA(2-sulfate) alpha
     1-4GlcN(N,6-disulfate) alpha 1-4GlcA(2-sulfate) beta 1-4GlcN(N,6-
     disulfate).  Thus, 2-O-sulfated glucuronate in the highly
     sulfated tetrasaccharide structures typical of heparin
     has been demonstrated.  The former and the latter tetrasaccharides account
     for 0.31 and 0.32% (w/w) of the starting heparin, respectively.  Their
     yield, however, is an underestimation, since these tetrasaccharide
     structures in longer sequences will be degraded by heparinase.  Although
     the latter tetrasaccharide described above was unexpectedly cleaved by
     heparinase into two disaccharide units, the former was not degraded by the
     enzyme most likely due to the lack of the 6-O-sulfate group on the GlcN
     residue at the reducing terminus.  The results indicate its capability of
     catalyzing both anti and syn elimination, a property shared by
     heparitinases I and II and chondroitinase ABC.  Both tetrasaccharides were
     degraded into disaccharides by heparitinase II.  Therefore, it is
     necessary to reevaluate the disaccharide composition of heparin/heparan
     sulfate or oligosaccharide structures, which were previously determined
     after heparinase or heparitinase II digestion.  It is no longer possible
     to conclude that the 2-O-sulfated unsaturated
     uronic acid residues obtained from heparin/heparan
     sulfate by lyase digestions are always derived from iduronate 2-O-sulfate
     residues in the original polymer.  It is quite possible that the novel
     glucuronate 2-O-sulfate structure in the highly sulfated region
     of heparin is involved in some of the biological activities of
     heparin.


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=> s Vislov Christian/AU
L5            0 VISLOV CHRISTIAN/AU

=> s Viskov Christian/AU
L6           20 VISKOV CHRISTIAN/AU

=> dis l6 1-20 bib abs

L6   ANSWER 1 OF 20  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2006:707054  CAPLUS
TI   Method of analysis of oligosaccharides from blood plasma [Machine
     Translation].
IN   Mourier, Pierre; Viskov, Christian
PA   Aventis Pharma SA, Fr.
SO   Fr. Demande, 27 pp.
     CODEN: FRXXBL
DT   Patent
LA   French
FAN.CNT 1
     PATENT NO.          KIND   DATE       APPLICATION NO.       DATE
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PI   FR 2880951           A1    20060721   FR 2005-554           20050119
     WO 2006077317        A1    20060727   WO 2006-FR112         20060118
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
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             KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX,
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             SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
             VN, YU, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
PRAI FR 2005-554          A     20050119
AB   [Machine Translation of Descriptors].  The present iNvention has as an aim
     a method of anal. of the oligosaccharides constituting heparins of low
     mol. weight and heparins of very low mol. weight starting from the blood
plasma.
RE.CNT  3      THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT
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L6   ANSWER 2 OF 20  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2006:218056  CAPLUS
DN   144:272811
TI   Process for production of K5 polysaccharide
IN   Colas, Gilles; Gervier, Regis; Lux, Fabien; Viskov, Christian
PA   Aventis Pharma SA, Fr.
SO   Fr. Demande, 60 pp.
     CODEN: FRXXBL
DT   Patent
LA   French
FAN.CNT 1
     PATENT NO.          KIND   DATE       APPLICATION NO.        DATE
     ---------------     ----   --------   --------------------   --------
PI   FR 2874931           A1    20060310   FR 2004-9497           20040908
     WO 2006030099        A1    20060323   WO 2005-FR2210         20050906
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
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             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
PRAI FR 2004-9497         A     20040908
AB   The present invention relates to a process of production of K5 polysaccharide,
     implementing a stage of fermentation with Escherichia coli, followed by
purification
RE.CNT  5      THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6   ANSWER 3 OF 20  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2005:1050845  CAPLUS
DN   143:353287
TI   Process for oxidizing unfractionated heparins and detecting presence or
     absence of glycoserine in heparin and heparin products
IN   Viskov, Christian; Mourier, Pierre
PA   Fr.
SO   U.S. Pat. Appl. Publ., 23 pp.
     CODEN: USXXCO
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE       APPLICATION NO.        DATE
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PI   US 2005215519        A1    20050929   US 2004-808409         20040325
     EP 1582531           A1    20051005   EP 2004-290791         20040324
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK
     WO 2005090411        A1    20050929   WO 2005-EP3719         20050322
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
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             SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
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             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
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             RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
             MR, NE, SN, TD, TG
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PRAI EP 2004-290791       A     20040324
AB   The invention provides a process for preparing heparin products with a
     reduced content of glycoserine.  A method for detecting glycoserine in
     prepns. of heparin is also provided.  Thus, crude heparin (60 g) was
     treated with 20% NaCl solution to yield 43.7 g (73%) of upgraded heparin.
     The upgraded heparin prepared (12 g) in NaCl solution (pH 8.7) was heated to
     800 C and then treated with solid KMnO4 (0.96 g) under defined conditions,
     followed by the treatment with 20% NaCl solution and 30% hydrogen peroxide
     solution to obtain 10.33 g (86.1%) of purified (oxidized and depyrogenated)
     heparin containing no glycoserine.  The processing increased the heparin
     activity from 150 IU/mg (crude heparin) to 203.5 IU/mg (purified heparin).

L6   ANSWER 4 OF 20  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2005:1048361  CAPLUS
DN   143:328040
TI   Method for quantitatively determining specific groups constituting
     heparins or low molecular weight heparins using HPLC
IN   Mourier, Pierre; Viskov, Christian
PA   Aventis Pharma S.A., Fr.
SO   Eur. Pat. Appl., 27 pp.
     CODEN: EPXXDW
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE       APPLICATION NO.        DATE
     ---------------     ----   --------   --------------------   --------
PI   EP 1580197           A1    20050928   EP 2004-290790         20040324
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK
     WO 2005090409        A1    20050929   WO 2005-EP3720         20050322
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
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             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM,
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         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
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             EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
             RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
             MR, NE, SN, TD, TG
PRAI EP 2004-290790       A     20040324
AB   In the method the sample to be assayed is depolymd. by the action of
     heparinases and then, where appropriate, the depolymn. product obtained is
     reduced and then an anal. is carried out by high performance liquid
     chromatog.
RE.CNT  6      THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6   ANSWER 5 OF 20  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2005:904243  CAPLUS
DN   143:225561
TI   Method for determining specific groups constituting heparins or low
     molecular weight heparins
IN   Viskov, Christian; Mourier, Pierre
PA   Fr.
SO   U.S. Pat. Appl. Publ., 23 pp.
     CODEN: USXXCO
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE       APPLICATION NO.        DATE
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PI   US 2005186679        A1    20050825   US 2004-808410         20040325
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     FR 2866650          A1    20050826    FR 2004-1810          20040224
     FR 2866650          B1    20060428
     EP 1586588          A1    20051019    EP 2004-290789        20040324
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     WO 2005080438       A1    20050901    WO 2005-EP2575        20050218
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             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
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     WO 2005090591       A1    20050929    WO 2005-FR431         20050223
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             MR, NE, SN, TD, TG
PRAI FR 2004-1810        A     20040224
     EP 2004-290789      A     20040324
AB   The invention provides methods for analyzing heparins, low-mol.-weight
     heparins, ultralow-mol.-weight heparins, and oligosaccharides by HPLC a
     stationary phase dynamically coated with a quaternary ammonium salt.  The
     methods of the invention may be used to analyze samples without
     pre-treatment or to analyze samples that were partially or exhaustively
     depolymerised and, optionally, reduced.  Specific saccharides can be
     detected.

L6   ANSWER 6 OF 20  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2005:549743  CAPLUS
DN   143:78436
TI   Preparation of carboxy-reduced derivatives of hyaluronic acid as
     metalloprotease enzyme inhibitor prodrugs
IN   Ulmer, Wolfgang; Viskov, Christian; Hubert, Philippe
PA   Aventis Pharma Sa, Fr.
SO   Fr. Demande, 38 pp.
     CODEN: FRXXBL
DT   Patent
LA   French
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
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PI   FR 2864090          A1     20050624    FR 2003-14989          20031219
     FR 2864090          B1     20060127
     WO 2005061550       A1     20050707    WO 2004-FR3227         20041215
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                RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
                MR, NE, SN, TD, TG
     US 2005203056          A1     20050915    US 2004-15947          20041217
PRAI FR 2003-14989          A      20031219
     US 2004-618661P        P      20041012
OS   MARPAT 143:78436
GI
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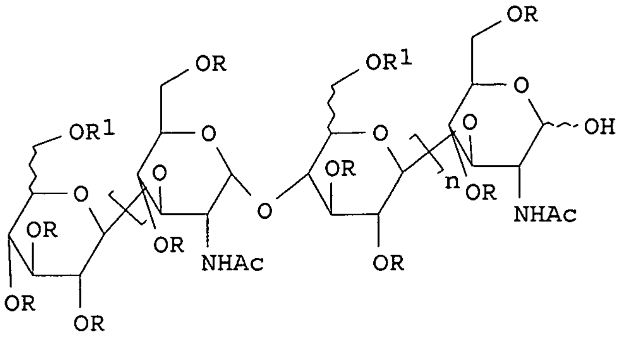

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AB   Polysaccharide carboxy-reduced derivs. of hyaluronic acid I, wherein R1-R4
     are independently H, SO3M; M is an alkaline metal; n is 0 and 2500, were
     prepared as metalloprotease enzyme inhibitor prodrugs.  Thus, I (R = R1 =
     SO3Na) was prepared and tested in vitro as metalloprotease enzyme inhibitor
     prodrug (IC50 = 0.8 μg/mL).
RE.CNT  11    THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6   ANSWER 7 OF 20  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2005:549742  CAPLUS
DN   143:78435
TI   Preparation of carboxy-reduced derivatives of chondroitin sulfate as
     metalloprotease enzyme inhibitor prodrugs
IN   Ulmer, Wolfgang; Viskov, Christian; Hubert, Philippe
PA   Aventis Pharma Sa, Fr.
SO   Fr. Demande, 47 pp.
     CODEN: FRXXBL
DT   Patent
LA   French
FAN.CNT 1
     PATENT NO.             KIND   DATE        APPLICATION NO.        DATE
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PI   FR 2864089             A1     20050624    FR 2003-14988          20031219
     FR 2864089             B1     20060203
     WO 2005061551          A1     20050707    WO 2004-FR3228         20041215
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
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             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
             RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
             MR, NE, SN, TD, TG
     US 2005187187          A1     20050825    US 2004-16175          20041217
PRAI FR 2003-14988          A      20031219
     US 2004-618662P        P      20041012
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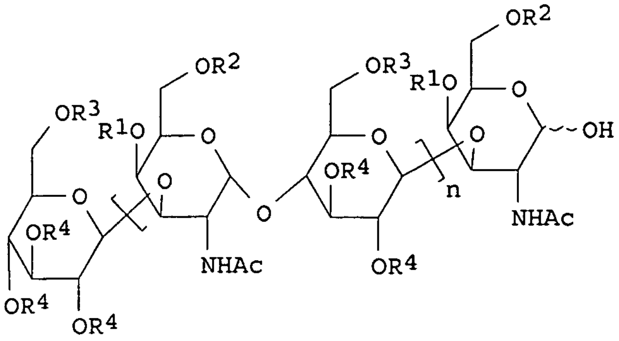

I

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AB   Polysaccharide carboxy-reduced derivs. of chondroitin sulfate I, wherein
     R1-R4 are independently H, SO3M; M is an alkaline metal; n is 0-200, were
     prepared as metalloprotease enzyme inhibitor prodrugs.  Thus, polysaccharide
     chondroitin sulfate I (R1-R3 = SO3Na, R4 = H) was prepared and tested in
     vitro as inhibitor of factor Xa (IC50 = 0.004 μg/mL) as metalloprotease
     enzyme inhibitor (IC50 = 0.4 μg/mL).
RE.CNT  10    THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6   ANSWER 8 OF 20  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2005:549740  CAPLUS
DN   143:78434
TI   Preparation of carboxy-reduced derivatives of Dermatan sulfate as
     metalloprotease enzyme inhibitor prodrugs
IN   Ulmer, Wolfgang; Viskov, Christian; Hubert, Philippe
PA   Aventis Pharma Sa, Fr.
SO   Fr. Demande, 47 pp.
     CODEN: FRXXBL
DT   Patent
LA   French
FAN.CNT 1
     PATENT NO.          KIND   DATE       APPLICATION NO.       DATE
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PI   FR 2864087           A1    20050624   FR 2003-14986          20031219
     FR 2864087           B1    20060127
     WO 2005061549        A1    20050707   WO 2004-FR3226         20041215
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
             RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
             MR, NE, SN, TD, TG
     US 2005164983        A1    20050728   US 2004-16501          20041217
PRAI FR 2003-14986        A     20031219
     US 2004-618667P      P     20041012
GI
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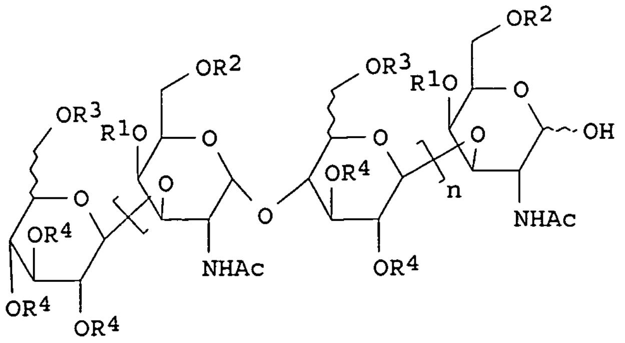

I

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AB   Polysaccharide carboxy-reduced derivs. of Dermatan sulfate I, wherein
     R1-R4 are independently H, SO3M; M is an alkaline metal; n is 0-150, were
     prepared as metalloprotease enzyme inhibitor prodrugs.  Thus, polysaccharide
     Dermatan sulfate I (R1-R3 = SO3Na, R4 = H) was prepared and tested in vitro
     as inhibitor of factor Xa (IC50 = 0-2.6 U/mg) as metalloprotease enzyme
     inhibitor (IC50 = 0.04-0.6 µg/mL).
RE.CNT  10    THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6   ANSWER 9 OF 20  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2005:77725  CAPLUS
DN   142:158299
TI   Mixtures of oligosaccharides derived from heparin, their preparation, and
     pharmaceutical compositions containing them
IN   Laux, Volker; Mourier, Pierre; Viskov, Christian
PA   Aventis Pharma S. A., Fr.
SO   Fr. Demande, 45 pp.
     CODEN: FRXXBL
DT   Patent
LA   French
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
PI   FR 2857971           A1    20050128    FR 2003-9041           20030724
     FR 2857971           B1    20050826
     AU 2004259111        A1    20050203    AU 2004-259111         20040722
     CA 2533555           AA    20050203    CA 2004-2533555        20040722
     WO 2005010051        A2    20050203    WO 2004-FR1943         20040722
     WO 2005010051        A3    20050616
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
             SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
             SN, TD, TG
     EP 1651677           A2    20060503    EP 2004-785991         20040722
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR
     US 2005090561        A1    20050428    US 2004-899618         20040727
     NO 2006000821        A     20060420    NO 2006-821            20060220
PRAI FR 2003-9041         A     20030724
     US 2003-516926P      P     20031103
     WO 2004-FR1943       W     20040722
OS   MARPAT 142:158299
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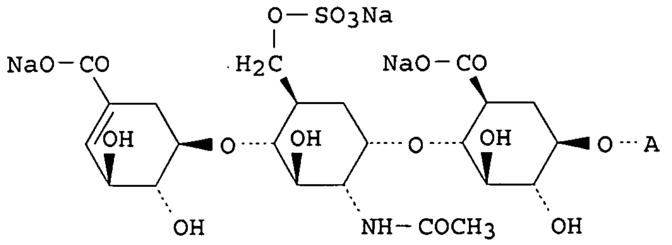

I

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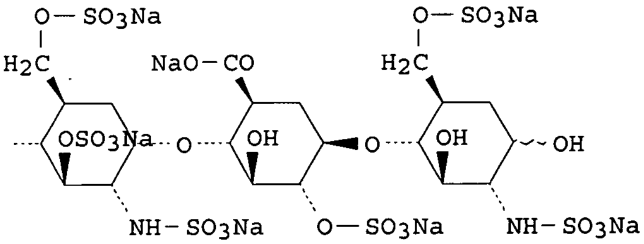

AB The present invention relates to mixts. of oligosaccharides derived from heparin having an average mol. weight of 1800 to 2400 Daltons, an anti-Xa activity of 190-450 UI/mg and being absent from anti-IIa activity, their method of preparation and pharmaceutical compns. containing them. The mixts. contain 2 to 16-ose type oligosaccharides having an unsatd. uronic acid 2-O-sulfate unit at their end and a hexasaccharide of I type in the form of alkali or alkaline-earth metal salt. The oligosaccharides can be prepared from a low-mol. weight heparin having average mol. weight 2000-3000 Daltons, an anti-Xa activity >140 UI/mg and an anti-IIa activity <5 UI/mg by: (a) transalification with benzethonium chloride, (b) esterifying the resulting heparin benzethonium salt with benzyl chloride and treating with an alc. solution of Na acetate to attain a Na salt of heparin benzyl ester, (c) transalification of the product above again preferably by salt of benzethonium, cetylpyrinium or cetyltrimethylammonium to attain a quaternary ammonium salt, (d) depolymg. the resulting heparin compound in a medium of organic base having strong pKa (preferably >20), (e) transforming the quaternary ammonium salt to a Na salt, and (f) saponifying the ester and purifying. the product.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 10 OF 20 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2005:2012 CAPLUS
DN 142:89363
TI Method for quantitatively determining specific groups constituting heparins or low molecular weight heparins
IN Viskov, Christian; Mourier, Pierre
PA Aventis Pharma S.A., Fr.
SO U.S. Pat. Appl. Publ., 18 pp., Cont.-in-part of U.S. Ser. No. 665,872.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004265943	A1	20041230	US 2004-808791	20040325
	FR 2844808	A1	20040326	FR 2002-11724	20020923
	FR 2844808	B1	20050225		
	US 2005119477	A1	20050602	US 2003-665872	20030918

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PRAI FR 2002-11724         A      20020923
     US 2002-422482P       P      20021031
     US 2003-665872        A2     20030918
AB   A method for analyzing heparins or low-mol.-weight heparins, characterized in
     that the sample to be assayed is depolymd. by the action of heparinases
     and then, where appropriate, the depolymerizate obtained is reduced and
     then an anal. is carried out by high performance liquid chromatog.

L6   ANSWER 11 OF 20  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2004:693668  CAPLUS
DN   141:309884
TI   Chromatographic analysis and sequencing approach of heparin
     oligosaccharides using cetyltrimethylammonium dynamically coated
     stationary phases
AU   Mourier, Pierre A. J.; Viskov, Christian
CS   Vitry-AlfortVille Research Center, Medicinal Chemistry Department, Aventis
     Pharma, Vitry surSeine, 94403, Fr.
SO   Analytical Biochemistry (2004), 332(2), 299-313
     CODEN: ANBCA2; ISSN: 0003-2697
PB   Elsevier
DT   Journal
LA   English
AB   C18 and C8 bonded stationary phases dynamically coated with
     cetyltrimethylammonium (CTA) and strong anion exchange (SAX) were
     developed to obtain sepns. of oligosaccharide mixts. resulting from chemical
     or enzymic depolymn. of heparin.  With this method, the retention of
     sulfated oligosaccharides is directly adjustable depending on the amount of
     CTA adsorbed into the column.  Oligosaccharides containing up to 20 sulfates
     were separated with a resolving power superior to that of conventional SAX
     anal.  The stability of the column coating enables hundreds of injections.
     Using ammonium methane sulfonate aqueous solns. as UV transparent mobile
     phases, it was possible to set up double detection, including selective
     detection of acetylated oligosaccharides.  Anal. gel permeation chromatog.
     was directly coupled to CTA-SAX, obtaining a two-dimensional profile of
     analyzed oligosaccharidic mixts.  A sequencing method of heparin
     oligosaccharides using partial depolymn. by heparinases according to their
     size and sulfation pattern and digest anal. by CTA-SAX was developed.  A
     direct application of this method to the anal. of oligosaccharide mixts.
     obtained by complete digestion of heparins by heparinases I, II, and III
     was done.  It allowed a reliable quantification of heparin building
     blocks.  We also focused our attention on di- and tetrasaccharidic species
     containing the 3-O-sulfated glucosamines taken as markers of the active sites
     for antithrombin III.  The method was also applied to more complex mixts.
     resulting from porcine heparin partially depolymd. with heparinase I. The
     specificity of the reaction was studied up to decasaccharidic fractions.
RE.CNT  32    THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6   ANSWER 12 OF 20  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2004:309890  CAPLUS
DN   140:304028
TI   Mixtures of polysaccharide derivatives of heparin, their preparation, and
     pharmaceutical compositions containing them
IN   Biberovic, Vesna; Grondard, Luc; Mourier, Pierre; Viskov,
     Christian
PA   Aventis Pharma S.A., Fr.
SO   Fr. Demande, 49 pp.
     CODEN: FRXXBL
DT   Patent
LA   French
FAN.CNT 1
     PATENT NO.          KIND    DATE        APPLICATION NO.        DATE
     ---------------     ----    --------    -------------------    --------
PI   FR 2845686           A1     20040416    FR 2002-12584          20021010
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     CA 2501546          AA    20040422   CA 2003-2501546        20031008
     WO 2004033503       A1    20040422   WO 2003-FR2960         20031008
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
             PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,
             TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2003300161       A1    20040504   AU 2003-300161         20031008
     US 2004171819       A1    20040902   US 2003-680934         20031008
     EP 1556414          A1    20050727   EP 2003-807882         20031008
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     BR 2003015149       A     20050816   BR 2003-15149          20031008
     CN 1798771          A     20060705   CN 2003-80100992       20031008
     JP 2006517185       T2    20060720   JP 2004-542566         20031008
     ZA 2005002787       A     20051018   ZA 2005-2787           20050406
     NO 2005002170       A     20050707   NO 2005-2170           20050503
PRAI FR 2002-12584       A     20021010
     US 2002-430095P     P     20021202
     WO 2003-FR2960      W     20031008
AB   The present invention relates to the preparation, depolymn., saponification,
purification of
     mixts. of polysaccharides derived from heparin having an average mol. weight of
     1500 to 3000 Dalton and an Anti-Xa/Anti-IIa ratio higher than 30.
RE.CNT  3      THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6   ANSWER 13 OF 20  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2004:270131  CAPLUS
DN   140:287660
TI   Preparation and HPLC of oligosaccharides obtained by heparinase-catalyzed
     depolymerization of low molecular weight of heparins
IN   Mourier, Pierre; Viskov, Christian
PA   Aventis Pharma S.A., Fr.
SO   PCT Int. Appl., 23 pp.
     CODEN: PIXXD2
DT   Patent
LA   French
FAN.CNT 3
     PATENT NO.          KIND  DATE       APPLICATION NO.        DATE
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PI   WO 2004027087       A2    20040401   WO 2003-FR2782         20030922
     WO 2004027087       A3    20050609
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
             GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
             LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ,
             OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
             TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     FR 2844808          A1    20040326   FR 2002-11724          20020923
     FR 2844808          B1    20050225
     CA 2499537          AA    20040401   CA 2003-2499537        20030922
     AU 2003279430       A1    20040408   AU 2003-279430         20030922
     BR 2003014654       A     20050802   BR 2003-14654          20030922
     EP 1558755          A2    20050803   EP 2003-772376         20030922
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        R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     JP 2006500019        T2     20060105    JP 2004-537235         20030922
     NO 2005001744        A      20050408    NO 2005-1744           20050408
PRAI FR 2002-11724        A      20020923
     US 2002-422482P      P      20021031
     WO 2003-FR2782       W      20030922
AB   A method for heparinase-catalyzed depolymn. of low mol. weight of heparins
     and HPLC structure determination of the corresponding oligosaccharides and
reduced
     oligosaccharides are reported.

L6   ANSWER 14 OF 20  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2004:249315  CAPLUS
DN   140:287659
TI   Preparation and HPLC of oligosaccharides obtained by heparinase-catalyzed
     depolymerization of low molecular weight of heparins
IN   Mourier, Pierre; Viskov, Christian
PA   Aventis Pharma S. A., Fr.
SO   Fr. Demande, 23 pp.
     CODEN: FRXXBL
DT   Patent
LA   French
FAN.CNT 3
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
PI   FR 2844808           A1     20040326    FR 2002-11724          20020923
     FR 2844808           B1     20050225
     US 2005119477        A1     20050602    US 2003-665872         20030918
     CA 2499537           AA     20040401    CA 2003-2499537        20030922
     WO 2004027087        A2     20040401    WO 2003-FR2782         20030922
     WO 2004027087        A3     20050609
        W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
            GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
            LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ,
            OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
            TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
            FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
            BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2003279430        A1     20040408    AU 2003-279430         20030922
     BR 2003014654        A      20050802    BR 2003-14654          20030922
     EP 1558755           A2     20050803    EP 2003-772376         20030922
        R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     CN 1703519           A      20051130    CN 2003-822562         20030922
     JP 2006500019        T2     20060105    JP 2004-537235         20030922
     US 2004265943        A1     20041230    US 2004-808791         20040325
     NO 2005001744        A      20050408    NO 2005-1744           20050408
PRAI FR 2002-11724        A      20020923
     US 2002-422482P      P      20021031
     US 2003-665872       A2     20030918
     WO 2003-FR2782       W      20030922
AB   A method for heparinase-catalyzed depolymn. of low mol. weight of heparins
     and HPLC structure determination of the corresponding oligosaccharides and
reduced
     oligosaccharides are reported.
RE.CNT  2      THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6   ANSWER 15 OF 20  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2002:90113  CAPLUS
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DN   136:153008
TI   Heparin-derived polysaccharide mixtures, preparation method and
     pharmaceutical compositions containing same
IN   Diaz, Jacques; Pecquet, Christelle; Perrin, Elisabeth; Viskov,
     Christian
PA   Aventis Pharma S.A., Fr.
SO   PCT Int. Appl., 30 pp.
     CODEN: PIXXD2
DT   Patent
LA   French
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
PI   WO 2002008295        A1    20020131    WO 2001-FR2332         20010718
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
             RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ,
             VN, YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     FR 2811992           A1    20020125    FR 2000-9572           20000721
     FR 2811992           B1    20030704
     CA 2416673           AA    20020131    CA 2001-2416673        20010718
     EP 1307491           A1    20030507    EP 2001-955436         20010718
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     BR 2001012612        A     20030729    BR 2001-12612          20010718
     JP 2004504451        T2    20040212    JP 2002-514199         20010718
     NZ 524028            A     20041224    NZ 2001-524028         20010718
     US 2002055621        A1    20020509    US 2001-909797         20010723
     US 6969705           B2    20051129
     NO 2003000296        A     20030120    NO 2003-296            20030120
     ZA 2003000898        A     20040430    ZA 2003-898            20030131
     US 2005171055        A1    20050804    US 2005-96146          20050401
PRAI FR 2000-9572         A     20000721
     US 2000-229123P      P     20000831
     WO 2001-FR2332       W     20010718
     US 2001-909797       A3    20010723
OS   MARPAT 136:153008
AB   The invention concerns heparin-derived polysaccharide mixts. having mol.
     weight 1500-3000, anti-Xa activity 100-150 UI/mg, anti IIa activity 0-10
     UI/mg, anti-Xa activity/anti-IIa activity >10, 2-26 saccharide groups,
     4,5-glucuronic 2-O-sulfate terminal groups, under alkali or alkaline-earth
     metal salt form.  These mixts. are manufactured by depolymn. of quaternary
     ammonium salts of benzyl esters of heparin in organic solvent using a strong
     organic base having pKa >20 or Na imidazolate, transforming the resulting
     quaternary ammonium salt of the depolymd. benzylic ester to the Na salt,
     and saponification of the ester.
RE.CNT  4     THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6   ANSWER 16 OF 20  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2001:730755  CAPLUS
DN   135:273169
TI   Preparation of uronic acid-containing oligosaccharides as antiinflammatory
     agents
IN   Mourier, Pierre; Perrin, Elisabeth; Viskov, Christian
PA   Aventis Pharma S.A., Fr.
SO   PCT Int. Appl., 37 pp.
     CODEN: PIXXD2
DT   Patent
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LA    French
FAN.CNT 1
      PATENT NO.              KIND    DATE          APPLICATION NO.         DATE
      ---------------         ----    --------      --------------------    --------
PI    WO 2001072762            A1     20011004      WO 2001-FR903           20010326
          W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
              CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,
              HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
              LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
              RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN,
              YU, ZA, ZW
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
              DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
              BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
      FR 2807043               A1     20011005      FR 2000-3910            20000328
      FR 2807043               B1     20021122
      CA 2403906               AA     20011004      CA 2001-2403906         20010326
      US 2002019368            A1     20020214      US 2001-817428          20010326
      US 6608042               B2     20030819
      EP 1272499               A1     20030108      EP 2001-919561          20010326
      EP 1272499               B1     20050309
          R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
      BR 2001009617            A      20030204      BR 2001-9617            20010326
      JP 2003529570            T2     20031007      JP 2001-570671          20010326
      EE 200200551             A      20040415      EE 2002-551             20010326
      AT 290543                E      20050315      AT 2001-919561          20010326
      PT 1272499               T      20050630      PT 2001-919561          20010326
      ES 2236206               T3     20050716      ES 2001-1919561         20010326
      AU 782713                B2     20050825      AU 2001-46639           20010326
      NZ 521558                A      20051028      NZ 2001-521558          20010326
      NO 2002004590            A      20020925      NO 2002-4590            20020925
      ZA 2002007707            A      20031224      ZA 2002-7707            20020925
      HK 1056564               A1     20050729      HK 2003-108634          20031126
PRAI  FR 2000-3910             A      20000328
      WO 2001-FR903            W      20010326
OS    MARPAT 135:273169
GI
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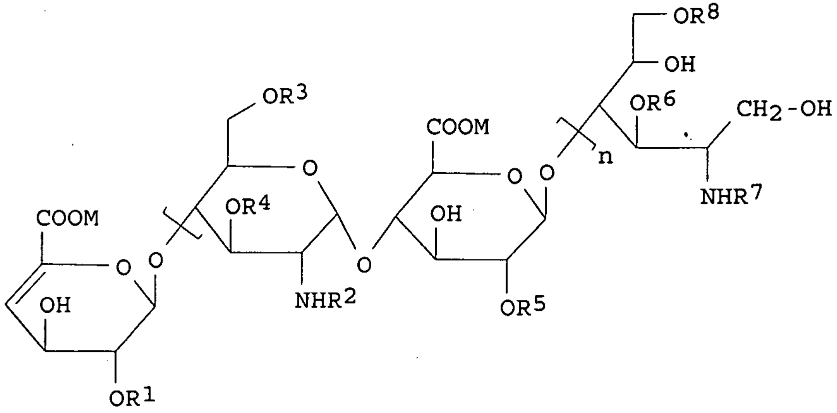

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AB    Uronic acid-containing oligosaccharides I (n = 0-25; R1, R3-R6, R8 are
      independently H, SO3M; R2, R7 independently H, SO3M, COMe; M is Na, Ca,
      Mg, K, oligosaccharide) were prepared from heparin as antiinflammatory
      agents.  Thus, I (n = 1; R1-R3 = R5 = R7-R8 = SO3Na; R4 = R6 = H) was
      prepared and tested in mice as antiinflammatory agent.
RE.CNT  3      THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
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ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L6   ANSWER 17 OF 20  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2001:300732  CAPLUS
DN   134:281073
TI   Preparation of uronic acid-containing oligosaccharides as antiinflammatory
     agents
IN   Mourier, Pierre; Perrin, Elisabeth; Viskov, Christian;
     Stutzmann, Jean-marie; Wahl, Florence
PA   Aventis Pharma S.A., Fr.
SO   PCT Int. Appl., 23 pp.
     CODEN: PIXXD2
DT   Patent
LA   French
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
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PI   WO 2001029055        A2    20010426    WO 2000-FR2897         20001018
     WO 2001029055        A3    20020214
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU,
             ZA, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
             CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     FR 2800074           A1    20010427    FR 1999-13182          19991022
     FR 2800074           B1    20011221
     CA 2388369           AA    20010426    CA 2000-2388369        20001018
     BR 2000014939        A     20020618    BR 2000-14939          20001018
     EP 1226148           A2    20020731    EP 2000-969634         20001018
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL
     TR 200201102         T2    20021223    TR 2002-1102           20001018
     JP 2003512385        T2    20030402    JP 2001-531853         20001018
     EE 200200208         A     20030616    EE 2002-208            20001018
     NZ 518539            A     20041029    NZ 2000-518539         20001018
     AU 781414            B2    20050519    AU 2000-79302          20001018
     US 6617316           B1    20030909    US 2000-693243         20001020
     ZA 2002003102        A     20030718    ZA 2002-3102           20020418
     NO 2002001859        A     20020613    NO 2002-1859           20020419
PRAI FR 1999-13182        A     19991022
     US 2000-174647P      P     20000105
     WO 2000-FR2897       W     20001018
OS   CASREACT 134:281073; MARPAT 134:281073
GI
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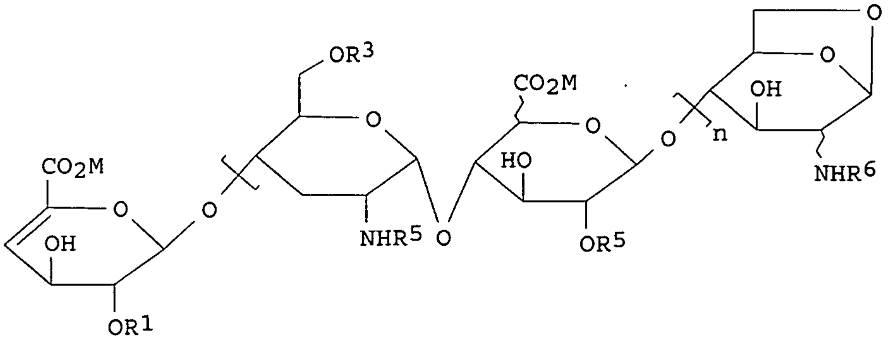

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AB   The invention concerns oligosaccharides I wherein n is 0-25; R1, R3-R5 are
     identical or different and represent H, SO3M; R2, R6 are identical or
     different and represent H, SO3M, COMe; M is Na, Ca, Mg, K; their
     diastereomers, methods for preparing them as antiinflammatory agents.  Thus,.
     4-Deoxy-2-O-sulfoanda-L-threo-hex-4-enopyranosyluronate-(1-4)-2-deoxy-2-
     sulfoamino-6-O-sulfo-D-glucopyranosyl-(1-4)-2-O-sulfo-aX-L-
     idopyranosyluronate-(1-4)-2-deoxy-2-sulfoamino-6-O-sulfo-D-glucopyranosyl-
     (1-4)-O-sulfo-ca-L-idopyranosyluronate-(1-4)-1,6-anhydro-2-deoxy-2-
     sulfoamino-3-D-glucopyranose undeca-sodium salt was prepared and tested in
     rats as antiinflammatory agent.

L6   ANSWER 18 OF 20  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   1999:819403  CAPLUS
DN   132:36039
TI   Preparation of cyclosporin derivatives via deprotonation reaction
IN   Viskov, Christian
PA   Rhone-Poulenc Rorer SA, Fr.
SO   PCT Int. Appl., 46 pp.
     CODEN: PIXXD2
DT   Patent
LA   French
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
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PI   WO 9967280          A1     19991229    WO 1999-FR1480         19990621
         W:  AE, AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GD, GE, HR, HU,
             ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX,
             NO, NZ, PL, RO, RU, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU,
             ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
             ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
             CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     FR 2780061          A1     19991224    FR 1998-7846           19980622
     FR 2780061          B1     20010907
     AU 9942700          A1     20000110    AU 1999-42700          19990621
     EP 1098903          A1     20010516    EP 1999-957167         19990621
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI
     JP 2002518519       T2     20020625    JP 2000-555931         19990621
     US 2001025025       A1     20010927    US 2000-742008         20001222
PRAI FR 1998-7846        A      19980622
     WO 1999-FR1480      W      19990621
OS   CASREACT 132:36039; MARPAT 132:36039
AB   The invention concerns a novel method for preparing an intermediate polyanion
     for preparing cyclosporin derivs. by treating a cyclosporin with a
     hexamethyldisilazane metal salt, optionally in the presence of a metal
     halide.  The treated cyclosporin has one or several free hydroxy groups
     and/or non-methylated nitrogen atoms in position α and/or any other
     acid group capable of deprotonation which are optionally deprotonated or
     in protected form.  Thus, [(R)-2-(N,N-dimethylamino)ethylthio-Sar]3
     cyclosporine A was prepared in 53 % yield via coupling of cyclosporine A
     with di-[2-(N,N-dimethylamino)ethyl] disulfide in presence of
     hexamethyldisilazane lithium salt and cesium chloride in tert-butylmethyl
     ether and toluene.
RE.CNT  8      THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6   ANSWER 19 OF 20  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   1999:425790  CAPLUS
DN   131:59141
TI   Preparation of cyclosporins modified in position 3 via polyanions and
     coupling reaction
IN   Amouret, Guy; Guerreiro, Antonio; Viskov, Christian; Mignani,
     Serge; Evers, Michel; Barriere, Jean-Claude; Bashiardes, Georges; Carry,
     Jean-Christophe; Filoche, Bruno
PA   Rhone-Poulenc Rorer S.A., Fr.
SO   PCT Int. Appl., 62 pp.
     CODEN: PIXXD2
DT   Patent
LA   French
FAN.CNT 1
     PATENT NO.          KIND    DATE          APPLICATION NO.         DATE
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PI   WO 9932512           A1     19990701      WO 1998-FR2745          19981216
         W:  AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GD, GE, HR, HU, ID,
             IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO,
             NZ, PL, RO, RU, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     FR 2772768           A1     19990625      FR 1997-16189           19971219
     FR 2772768           B1     20000114
     ZA 9811531           A      19990615      ZA 1998-11531           19981215
     AU 9917640           A1     19990712      AU 1999-17640           19981216
     EP 1040121           A1     20001004      EP 1998-962475          19981216
     EP 1040121           B1     20040721
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI
     JP 2002502803        T2     20020129      JP 2000-525449          19981216
     AT 271563            E      20040815      AT 1998-962475          19981216
     PT 1040121           T      20041130      PT 1998-962475          19981216
     ES 2224454           T3     20050301      ES 1998-962475          19981216
PRAI FR 1997-16189        A      19971219
     WO 1998-FR2745       W      19981216
OS   CASREACT 131:59141; MARPAT 131:59141
AB   The invention concerns a novel method for preparing a polyanion useful for
     preparing cyclosporin derivs. modified in position 3 by treating a
     cyclosporin with an alkali amide in liquid ammonia or in an aliphatic amine of
     low mol. weight, in the presence of a cosolvent, and optionally in the
     presence of dimethylpropyleneurea (DMPU).  The treated cyclosporin has one
     or several free hydroxy groups and/or non-methylated nitrogen atoms in
     position α and/or any other acid group capable of being subjected to
     deprotonation and which are optionally subjected to deprotonation, or are
     in protected form.  Thus, [(R)-2-(N-methyl-N-tert-butylamino)ethylthio-
     Sar]3-[4'-hydroxy-MeLeu]4-cyclosporin A was prepared via coupling of
     [4'-hydroxy-MeLeu]4-cyclosporin A with di-[2-(N,N-diethylamino)ethyl]
     disulfide in t-butylmethylether.
RE.CNT  3      THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6   ANSWER 20 OF 20  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   1994:631688  CAPLUS
DN   121:231688
TI   Electrically conducting polymers and their preparation
IN   Tomi, Pierre; Viskov, Christian; Perichaud, Alain
PA   Pattern'o, Fr.; Perthuisot, Olivier
SO   Fr. Demande, 32 pp.
     CODEN: FRXXBL
DT   Patent
LA   French
FAN.CNT 1
     PATENT NO.          KIND    DATE          APPLICATION NO.         DATE
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PI   FR 2696182           A1     19940401      FR 1992-12251           19920930
     WO 9527288           A1     19951012      WO 1994-FR366           19940331
         W:  JP, US
         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
PRAI FR 1992-12251               19920930
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AB    Elec. conducting polymers are prepared by dehydrochlorination of PVC with a
      non-nucleophilic strong base, treatment with a dienophile to reduce the
      number of conjugated double bonds (i.e., to reduce the susceptibility to
      degradation), grafting with ≥1 aromatic compound (e.g., thiophene,
      thiophenol, or thiazole) capable of forming charge-transfer complexes with
      ethylenic double bonds, and halogenating the product.


=> dis hist

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L2           3320 S L1 AND (SULFATED(S)HEPARIN)
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L4             39 S L2 AND (UNSATUR?(A)URONIC)

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